



THE FINANCIAL TIMES, OCTOBER 11, 1971

PACEMAKERS
in tunnelling
MITCHELL CONSTRUCTION
SEE PAGE 4

FINANCIAL TIMES

No. 25,575 Monday October 11 1971 ** 6p

Padley
for stainless steel
ALDRIDGE ENFIELD MANCHESTER GLASGOW

News Summary

GENERAL

Faulkner plea as violence simmers

As violence broke out afresh in Belfast, Ulster Premier Faulkner appealed again for Party unity and warned there was an increasing danger of "war weariness" in Britain leading to pressure for Ulster to be abandoned to "chaos."

The new trouble came in Belfast's Markets area. Twenty machine-gun shots and five rifle rounds were fired at Army patrols and two nail bombs were thrown. No casualties were reported but a crowd of over 100 was building up at Paisley Park, a bomb blast which damaged a sports pavilion was heard all over the city. One woman was injured.

Bomb probe

In Durham Street, Army experts were examining the wrecked pub where a blast killed a woman and injured 19 other people. Police last night told no theory about who fired the bomb, but admitted that the attack on the Catholic-owned pub may have been in retaliation for the blowing up of Protestant pub a fortnight ago. The Army also reported finding a large quantity of bomb-making equipment and arrested three more IRA suspects.

Peace rally

Meanwhile, over 3,000 people attended a peace rally in the city's Botanical Gardens organised as a result of an anti-violence petition which gathered 1,000 signatures.

In Monaghan, six miles inside the Irish Republic, militant Republicans and activists from Ulster met to plan a new Ulster front proposed by the IRA revolutionaries. (Back Page; Page 3)

IPD victory

In Bremen, Social Democrats made striking gains in Bremen State elections, regaining the absolute majority in the State Parliament they lost in 1966. The SPD's vote rose to 55 per cent, from 49 per cent, four years ago. The Christian Democrats also made gains, rising from 32 per cent to 39 per cent. The Free Democratic Party, who lost all their seats, and the Liberal Free Democrats, whose vote share was 11 per cent, from 10 per cent. The size of the victory surprised the SPD, which will claim as a vote of confidence for the coalition.

Hospitals cool to guinea pig claims

London hospitals reacted coolly to allegations on Radio 4 that experiments were being conducted on patients in British hospitals and that some patients were being used as guinea pigs for the most offensive. A Royal Free spokesman said the allegations were "entirely without foundation" while Hammer Smith refused comment.

Migrant law

Immigration laws are being tightened to allow immigrants to must register annually to do at employment exchanges, rather than police stations.

Ridge reopens

Lord Mayor, Sir Peter Lord, reopened the 14-year-old London Bridge on its new site, across the Colorado river at the Lake Havasu City, Arizona. A crowd of about 50,000 watched the ceremony, at which 3,000 cars were released. The bridge was bought for about £1.2m and has been taken apart to be transported to its new site.

Irohito: last stop

Lord Irohito and Empress Makiko, who yesterday spent a day in Switzerland after a turbulent tour visit, will fly to Lausanne today for Bonn and the seventh and last stage of a European tour.

Hefty...

Five people were recovered from injuries received when a truck collapsed as they were taking Gary Player beat Jack Nicklaus and 4 in the Pledgeline at Waulwode. Ben Hogan, Page 3

London Bond KB 932928 won 4 weeks £25,000. The winner is in Cheshire.

Survivors of Walthamstow, Merit Labour MP for Leyton, died aged 80.

Members of the first Australian duction of QH Calcutta have donated it when Sydney police seized the entire east on in-charge.

BUSINESS

CBI is to vet details of VAT

VALUE ADDED TAX details are to be examined by a special committee set up by the Confederation of British Industry. The CBI lists three points of principle which have arisen in discussions with the Customs and Excise. It believes that VAT "principles of neutrality" would be infringed by the wide range of items which tax officials want to disallow for credits; and that it is wrong to disallow all of a forestall possible evasion of a small part. The CBI says much double taxation would result if relief was withheld for purchase tax already paid on stocks of goods at the changeover to VAT, as stocks would be run down, with higher losses to the revenue than if relief was granted.

COMMON MARKET ENTRY

should bring greater benefits to Britain than the Government has estimated, according to a study by Dr. Edwin Truman, of Yale University, and Dr. Stephen Resnick, of New York University. Using their own econometric model, based on 1953-68 trade flows in Europe, they suggest that instead of the deficit forecast in the 1970 White Paper the balance on non-food items is more likely to show a substantial surplus. They produce figures taking into account three possibilities on the future position of EFTA "neutrals."

Airbus ideas for Thomson

ORDERS FOR THE A-300B European Airbus are a possibility being studied by Thomson Organisation travel interests for charter work. Britannia Airways would own the airbuses and Thomson Sky Tours would use them. Thomson executives in Cannes for the Association of British Travel Agents' conference took a trip to Toulouse to see the Airbus under construction. Thomson Holidays managing director Mr. Brian Llewellyn said the Airbus could meet the tour operator's needs of the mid-seventies for the increasing inclusive charter holidays.

THE COAL BOARD will

tomorrow reply to the £120m. pay claim for 350,000 miners. This would raise minima by £8 a week to £28 for surface workers and by £9 to £28 for underground men, with adult rates from 18 instead of 21 and a £35 minimum for men working under the National Power Loading agreement. Board chairman Mr. Derek Ezra has warned of serious consequences if the miners' demands are not met. Prices are pushed up faster than those of other fuels.

5m. General Motors cars

'have defect' 5m. GENERAL MOTORS cars may be dangerous because of defective engine mounting, says the U.S. Government agency, the National Highway Traffic Safety Administration, which is to issue a warning to owners of the cars affected. 4.9m. full-size Chevrolet made 1968-69 and 700,000 (smaller) Camaros. General Motors reported already to be paying for repairs arising from the defect—says it has a device to check deterioration of the engine mounting.

JETROU, TAX-FREE ISLET

of 45 acres and the smallest inhabited of the Channel Islands, is for sale—leasehold. The lease, at £100 rental to the Crown, has 24 years to run.

JAPAN, AS THE BIGGEST

steelmaker in the world by 1980, would by then generate 75 per cent. of demand for iron ore and coal sea transport and would thus dominate the level of bulk-cargo freight rates, says a Maritime Transport Research report. By 1980, the report adds, Japan's iron ore and coal imports are likely to grow by 160 per cent. Page 8

U.S. TREASURY BILL rates fell to their lowest since May at Three months 4.88 per cent. (4.54 last Monday) and six months 4.95 per cent. (4.74). The figures were issued early in Columbus Day in the U.S. today.

Now it's up to Davies, says McGarvey

UCS: crucial talks to-morrow after union concessions

BY ANDREW HARGRAVE, SCOTTISH CORRESPONDENT

GLASGOW, October 10. The fate of shipbuilding on the Upper Clyde is almost certain to be decided on Tuesday night when Mr. John Davies, Secretary for Trade and Industry, has yet another meeting with top union officials and UCS shop stewards in London.

"It is the crunch day as far as we are concerned," said Mr. Dan McGarvey, the top union negotiator, tonight after a meeting lasting 44 hours in a Glasgow hotel. Mr. Davies said later at his Cheshire home that he could not fully answer Mr. McGarvey's request for guarantees. "I shall have to listen very carefully to what Mr. McGarvey has to say on Tuesday. A great deal will depend on what I hear from him," he said.



Mr. Hugh Stenhouse

For the first time, the unions have made significant concessions. They agreed to negotiate with Govan Shipbuilders, the new Government-backed company, on wages and working practices on the basis of only three units—Govan, Linthouse and Scotstoun—in the hope that a buyer may be found for the Clydebank yard.

On his part, Mr. Hugh Stenhouse, chairman of Govan Shipbuilders (who cut short an Australian business trip to be present at today's crucial meeting), declared not only that he was not bound by the White Paper embodying the recommendations of the Government's "Four Wise Men" but that he would require a "substantially larger" work force than the 2,500 envisaged in the White Paper.

bulk carriers are not laid down at the Govan yard in the next few days, about 750 steelworkers would have to be paid off before the end of the year. Mr. Robert C. Smith, the liquidator (who also attended today's meeting), confirmed that he could only authorise expenditure on materials and wages if the Government guaranteed the funds.

At the same time, Mr. Furlong was flying back to Dublin in a much more hopeful mood. He, like Mr. Stenhouse, saw "significant progress" being made towards a working relationship between the new company and the work force.

This is especially true in view of the shop stewards—who have always insisted on UCS being kept as one group—now openly agreeing to the three-unit arrangement, with Clydebank being disposed of separately.

Study planned

Mr. Stenhouse repeated that the Scotstoun yard which was outside his original brief, would only be added to Govan and Linthouse if it was justified by the feasibility study to be carried out shortly.

Continued on Back Page

London to hold its hand after Moscow's reprisals

BY MICHAEL SIMMONS, EAST EUROPEAN CORRESPONDENT

BRITAIN seems unlikely to take any reprisals for the moment against the Kremlin for the measures announced on Friday. Foreign Office thinking is that, although Anglo-Soviet relations have been strained in a number of significant areas, there is no reason why the dialogue should not be resumed after a pause of some months.

The Russians, in their note demanding the British expulsions and cancelling bi-lateral meetings, made it plain that "it is entirely up to the British side" to see to the restoration of normal relations. Since, however, it is the Russians who have cancelled the Foreign Secretary's invitation to visit Moscow (which has been on the table for just over a year), Whitehall argues that it will be up to them to say sooner or later that the invitation is once again open.

Meanwhile, so far as the expulsions of present and former British Embassy staff are concerned, a certain logic has been maintained in the running for a long time. The expulsions of the Kama River Iron project, where Soviet sources were saying last month that the British "spin-off" could be well over £40m.

Some of this "spin-off" may now be lost, but the Soviet negotiations with Rank Xerox, which were at an advanced stage in June with the intention of taking about DM 5,000m. out of the economy, though in fact they took out nearer DM 7,000m. Any cut, designed to increase liquidity again, would be likely to go into effect on November 1.

The third candidate is the minimum reserve requirements which regulate the interest-free deposits the commercial banks are obliged to place with the Bundesbank. These were raised only in June with the intention of taking about DM 5,000m. out of the economy, though in fact they took out nearer DM 7,000m. Any cut, designed to increase liquidity again, would be likely to go into effect on November 1.

The Lombard rate (at which the Bundesbank lends to the commercial banks against a collateral) is 6.5 per cent. This too is a candidate for cutting, perhaps to the extent of restoring the more normal relationship of being only one percentage point above discount rate.

Talks possible

A number of working groups, operating under the 1968 Industrial Co-operation Agreement, and others started before the establishment last January of the Inter-Governmental Trade Commission, may thus continue to meet, albeit in a very chilly atmosphere. The interest shown by the Russians from now on could well be a barometer of their real intentions on political and other fronts.

But Britain has much leeway to make up in its trade with the Soviet Union. Even before this dispute erupted, the growing imbalance was causing concern in Whitehall, particularly when it was known that in other areas of the world Britain was proving a highly competitive exporter. British sales to Moscow, in the first eight months of this year, had reached £23.6m.

Why Moscow is still talking to everyone; Page 25

Bonn may ease credit policy this week

BY MALCOLM RUTHERFORD

BONN, Oct. 10. THERE IS a strong chance of a fairly major relaxation in West German credit policy when the Bundesbank Council meets on Wednesday for the first time since September 22. There is a strong possibility that even in an announcement made this week, a decision to cut the discount rate and lower minimum reserve requirements can no longer be much delayed.

In preparation for Wednesday's meeting Dr. Karl Klagen, Bundesbank president, will see Chancellor Brandt to-morrow to review the economic situation. Both Dr. Klagen and Prof. Schiller, the Economics Minister, have recently given firm hints that some relaxation of policy is on the way, and there is every reason to believe that Herr Brandt will want them to get on with it as soon as possible.

According to some observers measures might well have been taken last month, but the Bundesbank first wanted to await the outcome of the annual meeting of the IMF.

The discount rate has been at 5 per cent since the beginning of April, having been steadily reduced from a record 7.5 per cent in July last year. All earlier cuts, however, were made for external reasons in order to limit the inflow of dollars from abroad. Since the floating of the D-Mark in May these pressures no longer apply, and the Bundesbank is able to claim that it has regained some of its autonomy in credit policy.

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No dissent

Although reference to Mr. Spanierman's Raphael has appeared in one scholarly fine arts publication, its existence is nothing like common knowledge. This is certainly the case in New York, where, on Friday, I spoke to some half-dozen representative fine art dealers only one of whom had any linking that Mr. Spanierman had a Raphael up his sleeve.

Most of the past three years have been spent authenticating the work—the majority of it in Europe, where most Renaissance experts are to be found. Sir John Pope-Hennessy, director of the Victoria and Albert in London, is believed to have seen it and approved it, while Konrad Oberhuber, of the Albertina Gallery in Vienna, is also known to be satisfied with its pedigree. So far no dissenting voice appears to have questioned its genuineness.

Mr. Spanierman is the son of a New York art auctioneer and has continued the family business with a gallery at Madison Avenue. A number of art dealers have observed on Friday that he is a genuine portrait by Raphael but is very severely damaged.

New York to see 'Raphael' discovery

BY JUREK MARTIN

A DEVELOPMENT of significance for the art world will take place in New York to-morrow, the Financial Times has learned, when a leading art dealer here will formally put on display what is claimed to be a major work by Raphael, officially "lost" for over 100 years.

The work—a portrait of Duke Lorenzo de Medici probably painted in 1518—now belongs to Mr. Ira Spanierman, a familiar figure in New York art groups. He acquired it about three years ago at an auction here, when it was merely described as a painting by an anonymous 16th century artist, in which guise it had been shuttling back and forth between Europe and the U.S. since 1862, when its identity as a Raphael was last officially recognised.

Although Mr. Spanierman refuses to talk about the matter prior to to-morrow's events, it is believed that he may have paid as little as \$1,000 three years ago for a painting which, if its authenticity remains unshaken as it has been to date, is worth a great deal more. It is also believed that Mr. Spanierman picked up the work recently at an auction in New York conducted by Parke-Bernet, the American affiliate of Sotheby's in London.

Overpainted

Mr. Spanierman is expected to give more details about the painting's history to-morrow, when it would appear that it was fairly commonly known in Europe until about 1738, when it disappeared. It reappeared in 1862, when it was recognised by the noted expert Sir Charles Robinson as being the lost Raphael. However, it was so dirty and overpainted by then that there were apparently those who doubted its authenticity and in the course of this century, when it has appeared both at the Royal Academy in 1903 and at the Walker Gallery in Liverpool between 1959 and 1962, it had either been considered a copy by an anonymous 16th century artist, or a portrait of Francis I by Bronzino, or a combination of both.

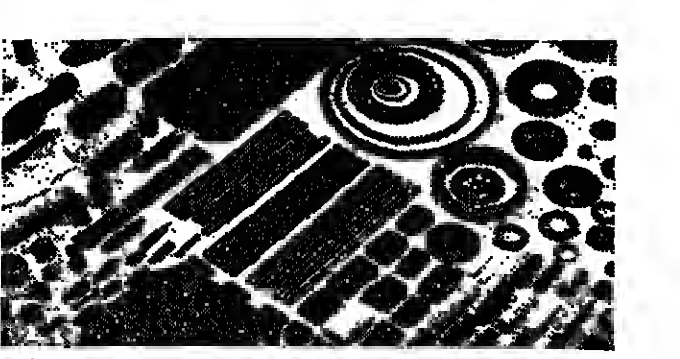
The picture was for a number of years in Britain as part of the collection of Lt. Colonel A. Heywood Lonsdale, M.C.; it was transferred to an unknown private collection in the U.S., from which Mr. Spanierman acquired it when it turned up in the New York art market three years ago. Mr. Spanierman found records of past sales on the back of the canvas, was familiar with the disappearance of the lost Raphael, started cleaning it up and proceeded from there.

London view

In London Sir John Pope-Hennessy told the Financial Times last night, "It is certainly a genuine portrait by Raphael but is very severely damaged."

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Overseas News



IN BRIEF

● **BRITISH** Week in San Francisco closed on Saturday and was declared a "qualified commercial success" by Mr. Michael Noble, the Minister for Trade. "The immediate results have been above expectations and—if the follow-up is good—it has been a very great success indeed," he said.

● **CHINESE** Premier Chou En-lai has declared firm support for Zambia against an alleged military threat from South Africa, the new China news agency reports.

● **MOROCCO** and the Soviet Union signed accords on Sunday to cooperate in merchant shipping and to build a new hydro-electric power station near Marrakech. The documents were signed at a five-hour session by Premier Abdel Kossyef and Rabat official visit. Mr. Kossyef has accepted an invitation to visit Southern Yemen, but no date has been fixed yet.

● **INDIA** will hold a national population census in November 1973.

● **INDIA** successfully test-fired a short-range rocket for the first time on Saturday from its new launching facility at Sriharikota Island, about 30 miles north of Madras. Officials said the programme was mainly to check the system launching complex at Sriharikota. The rocket, an Indian satellite is expected to be put into orbit in the next three or four years.

● **CHINA** has granted Ethiopia an interest free long term loan of about \$300m. to be repaid with exports of official Chinese plan news agency reported from Shanghai. China is also to send engineering and technical personnel to Ethiopia to render technical assistance.

● **VIENNA**: Both the Austrian Government and the Roman Catholic churches of Austria and Hungary were reported upset by Cardinal Jozsef Mindszenty's plans to come to Vienna to live. Government sources said this neutral nation feared Cardinal Mindszenty's presence here could harm relations with Hungary.

Amin against restoration of kingdoms

By Our Own Correspondent

KAMPALA, Oct. 10.

PRESIDENT AMIN seems to have closed the door on hopes that Uganda's hereditary kingdoms, abolished by former President Obote in 1967, would be restored. In an independence anniversary speech yesterday he "referred to strong pressure from Uganda, largest of the former kingdoms, for its restoration and also 'clearly and categorically' that kingdoms would not be reintroduced."

Uganda must remain united with no divided loyalties, he said. Referring to security, President Amin said the situation was now absolutely under control and the guerrilla threat had been contained effectively. He made a special reference to the East African Community, which has been threatened by lack of communication with Tanzania "which refuses to recognise the military regime here and said Uganda would continue to give fullest co-operation and play her full role in the community."

KAUNDA MEETS STUDENTS

By Our Own Correspondent

LUSAKA, Oct. 10.

PRESIDENT KAUNDA met students at Zambia university private for a three-hour session this week-end, freely answering challenging questions in an attempt to repair some of the damage to his popularity done by the closure of the campus, the temporary expulsion of the student executive, and the deportation of two popular lecturers.

Sadat's future may depend on results of Moscow visit

By RICHARD JOHNS, MIDDLE EAST CORRESPONDENT

PRESIDENT ANWAR SADAT left Cairo yesterday for talks in Moscow with the Soviet leader. The ship from which he is expected to demand a more offensive military capability and a greater commitment, possibly extending beyond a mere diplomatic one, to help him resolve his acute political dilemma. On his way to Moscow he stopped overnight in Kuwait and will talk with the Shah of Iran at Tehran to-day for two hours.

Following Egypt's virtual rejection last week of the six point plan presented by Mr. William Rogers, the U.S. Secretary of State, for a partial settlement with Israel, he will be looking to the Soviet Union for this increased support so that he can increase pressure on Jerusalem to soften its terms.

Mr. Sadat's team includes his first Deputy Prime Minister, Mr. Sikky, ASU Central Committee Secretary, Mr. Mohamed Abdel Zagay, his national security adviser, Mr. Hafez Ismail and the new Minister of State for Foreign Affairs, Mr. Murad Ghalib, who has just completed 10 years as ambassador to the USSR. The team will be joined in Moscow by Foreign Minister Mr. Mahmoud Riad who is flying in from the UN.

Egypt's War Minister, General Mohamed Sadek, has been in the Soviet capital since Thursday, holding discussions with Defence Minister Andrei Grechko.

Mr. Sadat will hope to get the

answer to one question spelled out with the Soviet leader: will the missile bases go into action to defend Egyptian targets should Egypt provoke retaliatory action? The indications are that the Russians have been telling Egypt not to restart the fighting.

It is possible that his political future could depend on the outcome of the discussions because of the promises recently repeated this year, that 1971 would be Egypt's "year of destiny," deciding whether the country would be resolved by "peace or war." By this, the Egyptian President has meant that by the end of the year the position must be defined one way or the other. It is a pledge that the armed forces might hold him to.

Cold douche

The Russians for their part could be of only limited use to Egypt in the last three months in particular since Egypt helped to restore President Nasser to power at the expense of the short-lived Marxist regime in Khartoum in July. There has been a discernible deterioration in relations between Cairo and Moscow. This has been a complete contradiction of the friendship signed in May.

In Washington officials have been at pains to stress that "the door is still open" for a partial

settlement, involving limited Israeli withdrawal and the reopening of the Suez Canal, along the lines of the Rogers' proposals.

In his speech to UN General Assembly Mr. Mahmoud Riad, Egypt's Foreign Minister, took apparent care not to dismiss completely out of hand the Rogers' proposals. However he described them as a "trap" which could lead to a consolidation of the Israeli occupation of Arab territory. With Israel also throwing a cold douche on the Secretary of State's proposals the "cautious optimism" expressed in Washington appears at present to have only the slenderest of bases.

Before leaving, President Sadat, in an address to university professors, repeated conditions for a partial settlement all of which Israel has rejected. As reported by the newspaper Al Akhbar, he said that any ceasefire should be of only limited duration (he has formerly laid down a six month time period); Egyptian troops must be allowed to take up positions in Sinai; there should be no discussion of frontiers; the people of the Gaza Strip had the right to determine whether they would be independent or join Egypt—they would not be annexed by Israel.

Our Beirut Correspondent writes: The potential Arab-Israeli confrontation in the Gulf area is the main subject. President Sadat will discuss with the Emir of Kuwait, Sheikh Sabah al Jaber al Sabah, and the Shah of Iran, informed sources believe.

Mr. Sadat arrived in Kuwait on Sunday on a one-day visit. This is the first State visit to Kuwait and Tehran by any Egyptian President.

Kuwait, through official statements, has expressed profound concern over the Shah's declaration that his country will use force if need be to seize three islands in the Gulf after the British withdrawal from the area by the end of this year. The islands, Abu Musa and the Tumb, now belong to Sbarja and Ras al Khaimah. Egypt, on the other hand, has given indications it does not want an Arab armed clash with Iran at the time all Arab energies should be devoted to the main confrontation with Israel.

Socialist victory in Austria

By Paul Lendvai

VIENNA, Oct. 10.

CHANCELLOR Kreisky's Socialist party has apparently achieved a resounding victory in today's general elections. With 56 per cent of the votes counted, all computer predictions agree that the Socialists will win at least 92 seats out of a total of 185.

This means that for the first time in Austrian history the Socialists have captured the absolute majority in Parliament. They have been in power since March, 1970, but only on the basis of a minority Government. Due to the new electoral law which raised the number of MPs from 165 to 185, to-day's results cannot be compared to the last poll which gave the Socialists 61, the People's Party 75 and the small Freedom Party six seats.

The Socialists appear to have won this surprisingly clear victory for several reasons, in particular the outstanding personality of Chancellor Kreisky, whose moderate and pragmatic programme appealed to the floating voters. Most of the Socialist Ministers, especially the young Finance Minister, Dr. H. Androsch, and the Minister of Education, Herr Gratz, established themselves as capable and moderate men.

Finally, the People's Party is in a leadership crisis and proved unable to regain its grip on the confidence of a wider public. Its attempt to appeal to the extreme Right through the candidacy of a "former SS Captain" and a Pan-German propagandist, appear to have backfired.

There is one snag to the Socialist victory. As they provide the President (Speaker) of the Parliament, this will reduce the Socialists to 91 votes on most occasions, one short of a majority. If they do get 92 seats, they will probably have to form a Coalition.

Chancellor Kreisky has repeatedly rejected any idea of further nationalisations, and is pledged to a programme which seeks to modernise, but not socialise, Austria.

Renter adds: Dr. Karl Schleifner, leader of the People's Party conceded defeat to-night as Chancellor Kreisky's party headed for victory.

Pakistan allows politics again—within limits

BY OUR OWN CORRESPONDENT

KARACHI, Oct. 10.

POLITICAL activities were resumed in Pakistan this morning following the lifting of a ban imposed by President Yahya Khan six months ago. But the President, acting as Chief Martial Law Administrator, imposed strict limits on the forms of activity allowed.

A new regulation forbids the propagation of "any opinion or act in any way prejudicial to the ideology or integrity or security of Pakistan or to any of the principles enunciated in the Legal Framework Order."

The ban, imposed after the Army crackdown in East Pakistan in March, has been lifted because of by-elections soon to be held for the vacant national and provincial assembly seats in the East wing. But the Awami League, which was outlawed on March 26 remains banned.

The by-elections are for the seats formerly held by Awami League members who have been disqualified. After the December elections the Awami League had an overall majority in the National Assembly with 167 seats out of 313, and also won 288 of the 300 East Pakistan provincial assembly seats. In August the Pakistan authorities published lists of 88 National Assembly members and 94 provincial members of the party who would be allowed to retain their seats.

Renter adds: The regulations specifically ban political pressure on schools, colleges and newspaper offices and presses. Party propaganda must not "transgress the limits of decent and fair criticism of any other political party or its members."

Nor may it obstruct the "holding of by-elections to the national or provincial assembly." People engaged in politics face a maximum of three years' detention if they violate the new rules.

In Moscow—Pravda accused Pakistan's military rulers of staging a "judicial reprisal" against Sheikh Mujibur Rahman. By putting him on trial they were attempting to shift responsibility for the crisis in East Pakistan to the Awami League and its leader, the paper declared.

It said the Soviet people demanded the release of Sheikh

Japan in force at Canton

BY OUR OWN CORRESPONDENT

TOKYO, Oct. 10.

JAPAN plans to send 3,300 business representatives of 1,457 factories, announced to-day it plans to send two senior executives to Canton to explore the possibilities of selling electronic computers to China. Fujitsu will be the first Japanese computer maker to send representatives to the fair.

The Fujitsu mission hopes to discover what types of computers the Chinese have an interest in and whether their technical standards in this area are up to handling the more sophisticated computers. An official of the company said the firm interprets the embargo list of the Co-ordinating Committee for Export Control as not preventing the export to China of medium and small computers.

Meanwhile, executives of Hitachi Limited told reporters that the company currently is negotiating the sale of gas turbine power generators to China. Hitachi, a leading Japanese manufacturer of electric power equipment, would not reveal how many generators are involved or what the overall price is likely to be.

Hitachi recently made a conciliatory gesture towards China by informing Peking it did not intend to make any more business investments in Taiwan or Fujitsu Limited, one of Japan's South Korea.

Lanusse stronger after failed coup

BY OUR OWN CORRESPONDENT

BUENOS AIRES, Oct. 10.

PRESIDENT Alejandro Agustin Lanusse has emerged greatly strengthened from the attempted military revolt which failed with the surrender of its leaders 17 hours after it broke out on Friday afternoon.

Not only have most of the political parties—including the Communists—expressed support for the President and repudiated the revolution attempt, which was in part motivated by opposition to the recent firing of Lanusse, but he has been arrested. On Friday night he told a reporter of the official Telam news agency that the revolt which had begun that afternoon "terminates the counter-revolution."

Only the garrison at Azul and Olavarría 25 miles from Azul with a total of 5,000 army personnel declared themselves in revolt. There was early speculation that the air force would join the movement, but both the air force and the navy remained loyal to President Lanusse.

The rebel leaders surrendered on Saturday morning to loyalist forces which had surrounded the Azul and Olavarría garrisons and are now imprisoned in the accused President Lanusse of General Pico garrison in La "counter-revolution"—meaning Pampa province just west of that he had betrayed the original Buenos Aires Province. Five generals of the 1966 military take-over which were put the

country in order before permitting elections again.

The Government claims the rebels wanted to install "Fascist" rule. It can be assumed that they wanted to restore the regime to the more dictatorial orientation it had under the first two military Presidents, Generals Juan Carlos Onganía and Roberto Marcelo Levingston. Gen. Levingston, deposed in March by President Lanusse, has been arrested. On Friday night he told a reporter of the official Telam news agency that the revolt which had begun that afternoon "terminates the counter-revolution."

Only the garrison at Azul and Olavarría 25 miles from Azul with a total of 5,000 army personnel declared themselves in revolt. There was early speculation that the air force would join the movement, but both the air force and the navy remained loyal to President Lanusse.

The rebel leaders surrendered on Saturday morning to loyalist forces which had surrounded the Azul and Olavarría garrisons and are now imprisoned in the accused President Lanusse of General Pico garrison in La "counter-revolution"—meaning Pampa province just west of that he had betrayed the original Buenos Aires Province. Five generals of the 1966 military take-over which were put the

Krag picks his Cabinet

BY OUR OWN CORRESPONDENT

COPENHAGEN, Oct. 10.

MEMBERS of the Social Democratic Party's old guard were chosen for the key positions in the 19-member Cabinet announced by the new Danish Prime Minister, Mr. J. O. Krag, Minister, but this time with the title of Minister for Foreign Economic Policy. The post of Foreign Minister goes to Mr. K. B. Andersen, a leading critic of the American policies in Vietnam.

Mr. Erling Jensen, currently head of the Trade Union Congress College of Further Education, becomes Minister of Commerce and the Defence Ministry is in the hands of Mr. Kjeld Olesen, the man behind Social Democratic plans for major cuts in defence strength.

Denmark's negotiations with the European Communities will be in the hands of Mr. Ivar Noergaard, also returning to his announced by the new Danish Prime Minister, Mr. J. O. Krag, Minister, but this time with the title of Minister for Foreign Economic Policy. The post of Foreign Minister goes to Mr. K. B. Andersen, a leading critic of the American policies in Vietnam.

Mr. Erling Jensen, currently head of the Trade Union Congress College of Further Education, becomes Minister of Commerce and the Defence Ministry is in the hands of Mr. Kjeld Olesen, the man behind Social Democratic plans for major cuts in defence strength.

SPD scores resounding win

By MALCOLM RUTHERFORD

BONN, Oct. 10.

THE SOCIAL DEMOCRATS (SPD) have won a striking victory in today's German State elections and have regained the absolute majority in the Bremen Parliament they lost in 1967. The SPD's share of the vote rose from 46 per cent four years ago to around 65 per cent today, the best performance in any State election since the SPD took over government in Bonn in June 1968.

The size of the victory seems to have surprised even the SPD, which was tonight there at a loss to explain it. There is some feeling, however, that the SPD may have picked middle of the road voters who are moving to the right by opposition Christian Democrats.

Amid a blaze of publicity the SPD last week elected Dr. Rainer Winkel as its new party chairman, move which has been widely interpreted in the German Press as a victory for Herr Franz Josef Strauss. Both Dr. Barzel and Mr. Strauss are strong critics of the Government's present position in any case, whatever the plan. The Social Democrats in Bonn are likely to claim the Ostpolitik has now secured a decisive vote of confidence, perhaps the best it has ever had. The Government's "Sonderweg" worries that the Bonn treaty may fail to get through the Bundestag should be considerably eased.

The Christian Democrats also picked up votes, but their share rose from 29.5

in the previous election four years ago to just under 32. The chief casualties were the far right wing National Democrats (NPD) who have been voted out of the State Parliament altogether, and the Liberal Free Democrats, whose share of the vote fell from 10.5 per cent in 1967 to 7.5 per cent to-day. The NPD which in 1967 won 5.8 per cent and eight seats, to-day polled less than 3 per cent. As a political force all State elections over the past year or so have suggested it is finished. The West German Communist Party, which fought a very active campaign, did only marginally better and also failed to be returned to Parliament.

Greek mini-Parliament

ATHENS, Oct. 10.

THE ARMY-BACKED Greek Government yesterday announced that elections would take place on November 23 to select a 75-member consultative committee to advise it on legislation. The committee, known here as "Mini-Parliament," provides that it may debate and comment on drafts before they are passed by the Cabinet.

Its opinion is not binding on the Government and it does not have the power to initiate or enact legislation. The body debates the bills before they are approved by the ruling military regime.

The Free Democrats' poor performance, however, is rather a mixed blessing for the SPD. Until May there was an SPD-FDP coalition in Bremen on the lines of that in Bonn. The Free Democrats then walked out in protest against the Socialists' policy towards the new Bremen University. The SPD is likely to suggest renewing the coalition if only to prevent a deterioration of SPD-FDP relations in Bonn.

The two parties are now closely tied together because the CDU is still the majority party in Bonn, and even after the Federal elections in 1973 the Socialists may well still need FDP support if they are to go on governing.

About 15,000 Greeks belonging to various professional and trade union organisations as well as mayors and town councils will vote on behalf of the country's electorate to select 120 members of the committee. Premier Mr. George Papadopoulos will narrow the number down to 60, and he will also appoint 15 more members of his personal choice.

The new Parliament, with an age limit between 25 to 65, will be elected for a two-year term and will sit from January 1 in Athens. It will replace the existing 58-member committee which was elected last year. Reuter



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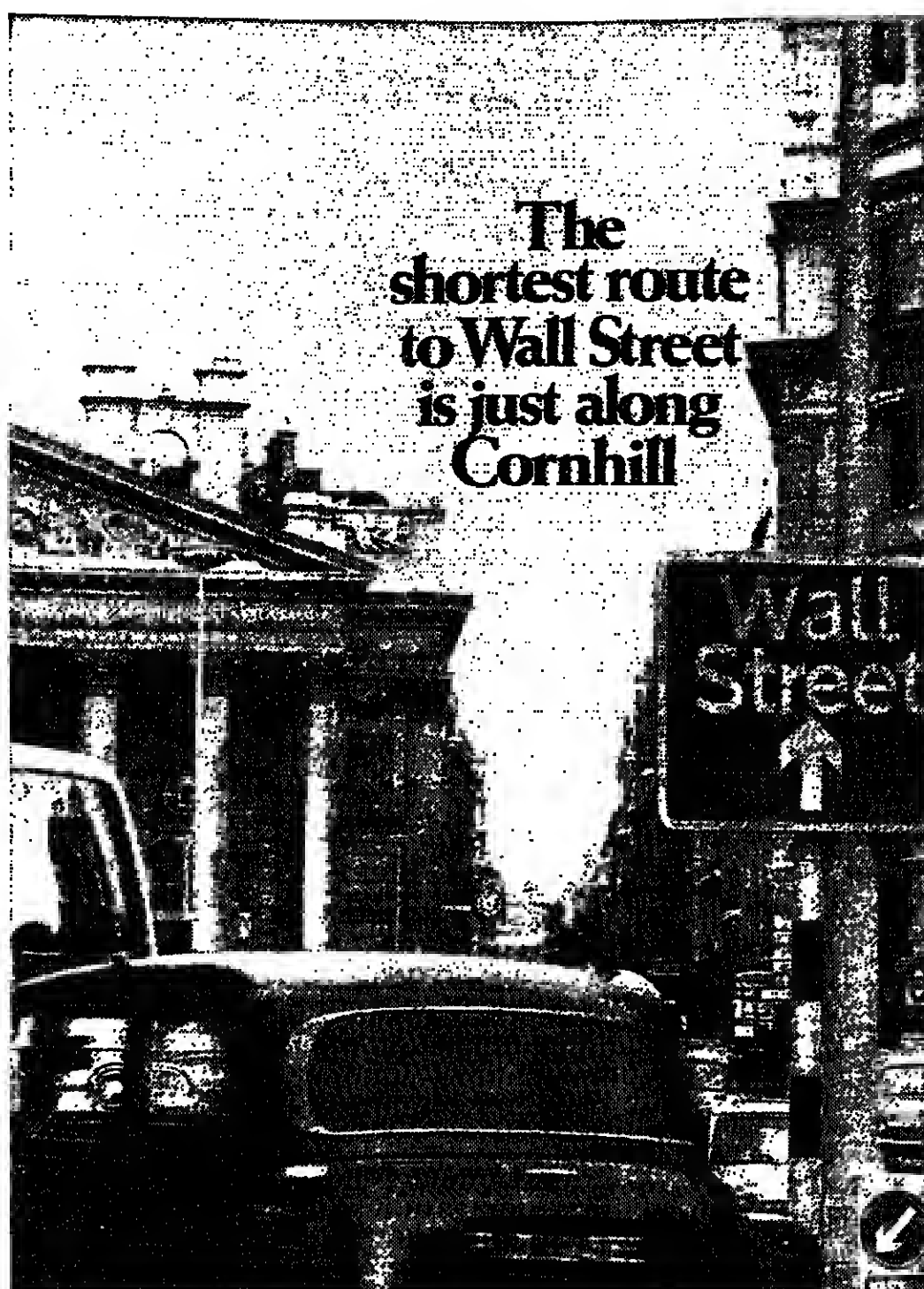
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SPORT 2: YACHTING

Wanted: More cash for Olympic hopes

BY ALEC BEILBY

BRITAIN's Olympic yachtsmen have joined the ranks of other amateur sportsmen and their supporters who are seeking funds, over and above those available from the British Olympic Committee, to enable them to compete in next year's Olympic Games in Germany. On a cost basis, yachting is second only to the equestrian events and is on a similar level to winter sports (which are being held in Japan) but yachting is at present being a disastrous last and leading for ridicule when the results of current fund raising efforts are considered.

The Royal Yachting Association is the national administering authority for competitive and non-competitive sailing, which includes our national Olympic effort, and in this capacity established the British Olympic Yachting Appeal. The Association estimated that a sum of £20,000 per annum would be needed to ensure that our potential Olympic team sailors have the chance to compete in all leading international events at home and abroad and also to ensure that the final team and reserves will be equipped with the best physical and financial support available at Kiel next September.

Appeal schemes

Robin Knox Johnston was appointed as Chairman of the Appeal and help was readily offered by 1968 Olympic Bronze Medalist, Robin Aisher, and 1964 Olympic Silver Medalist, Tony Morgan. An attractive Appeal brochure was prepared to which Prince Philip contributed a short but straight-to-the-point introduction. The RYA offered help by suggesting that all members of the Association's Council, the Yacht Racing Divisional Committee and the Olympic Committee should put forward the names of three people whom they knew personally and to whom they would recommend a meeting with the Olympic Appeal fund raisers. Three letters were sent to each committee member from the Secretary-General of the RYA, Nigel Hacking, producing a mere handful of replies. A personal written appeal from Robin Knox Johnston to the secretaries of the 1,500 yacht clubs affiliated to the RYA met with little more success.

Added to the efforts of Robin Knox Johnston have been those of Monica Dixon, a young capable girl with more experience in fund raising than sailing, but with a personality that must make it hard for the board members of the companies she has

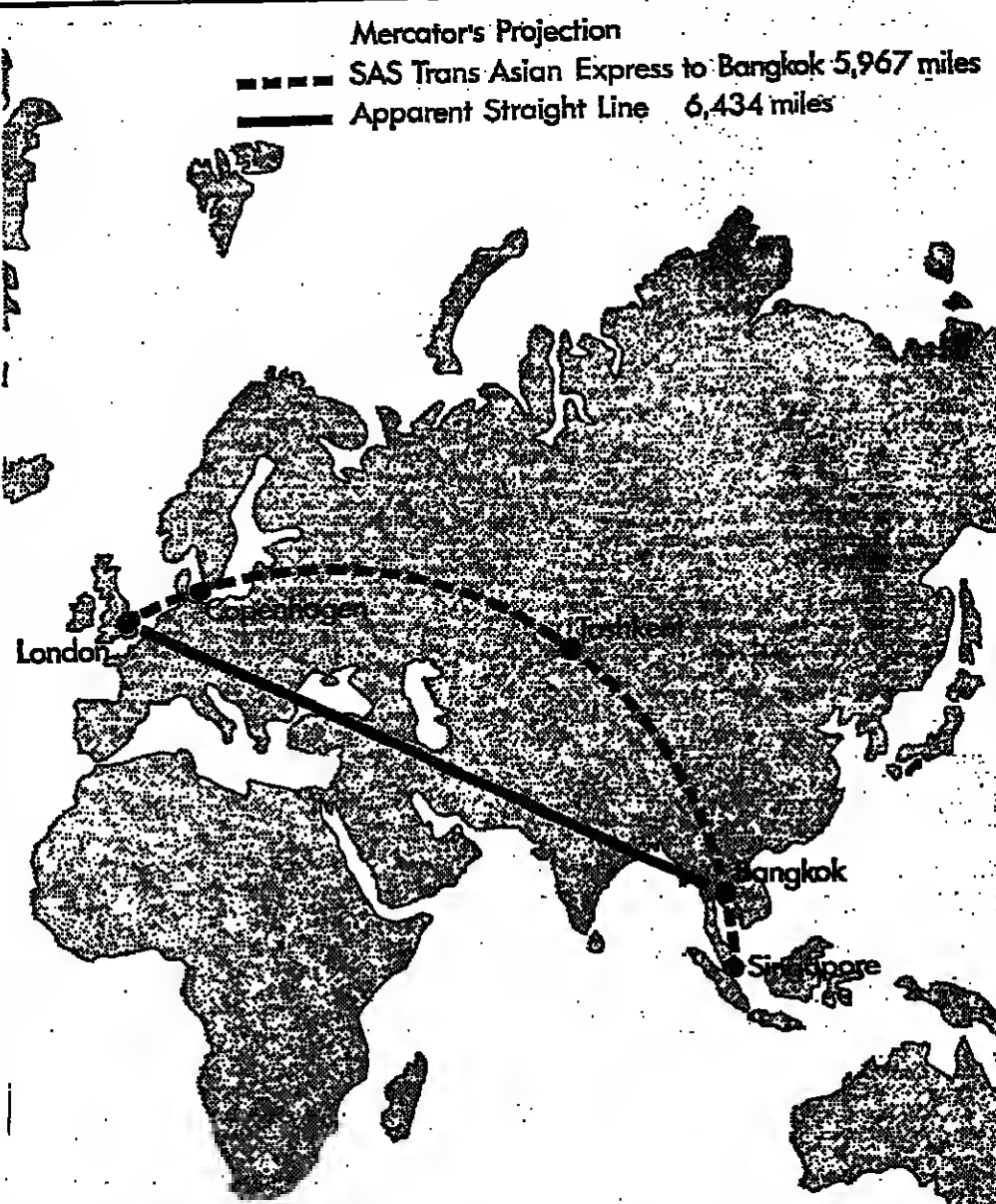
visited to refuse an interview. Her task has been to initiate and follow up approaches to industry and, at the same time, co-ordinate a fund raising lecture tour available from the British Olympic Gold Medalist Iain Macdonald Smith are making during the winter months.

In spite of her energy and enthusiasm, she is obviously disappointed. Since she began working in July she has visited many companies but managed to raise only £2,500. She admits to more success with the individuals she meets than with companies as a whole and one director of a brewery gave her £25 for the fund as a consolation prize for travelling out to Park Royal to see him.

Where has the British Olympic Yachting Appeal gone wrong? The efforts of Knox Johnston and his team are without question impressive, even if frustrated and the finger of suspicion must surely fall on the RYA. Its 29,000 members and the 1,500 affiliated clubs who are apparently unable to raise the sum among themselves. If Britain's yachtsmen cannot join together to find the money, then why should British industry, which will receive very little return in terms of advertising for their help, step in and take their place?

Scapegoat

Instead of being the fund-raising organ for the RYA the BOYA seems as though it could well become the scapegoat if the required target is not reached. The RYA came out in the open and insisted that each of its members contributed a mere £1 personally or each of its affiliated clubs donated £10 (or the bar profits for one Saturday) the BOYA could then go to industry and ask them to match or at least support the efforts of those who enjoy yachting each year and who, at present, bathe in the reflected glory of Olympic yachting medals without contributing towards them.



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Allied Bank's representative office in Tokyo—its second in Asia—reflects the Bank's increasing commitment to banks, corporations and individuals with interests in the Pacific basin.

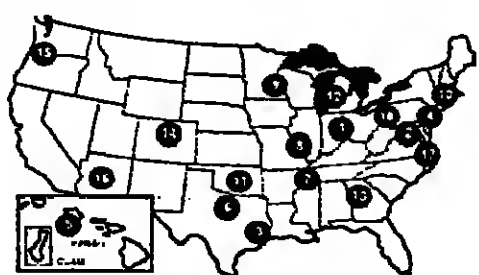
Owned by 18 major regional banks throughout the United States, Allied Bank provides unequalled access to U.S. markets. The Allied Group has more than 782 banking offices across the nation and assets exceeding \$18 billion. Headquartered in New York City, Allied has branches in London and Nassau, an office in Hong Kong and correspondents worldwide.

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Additions to Motorail network

Financial Times Reporter

BRITISH RAIL is planning four new services on its Motorail network in 1972 in a bid to capture a bigger share of the growing motorised holiday market.

During 1972 there will be space aboard Motorail trains on 27 routes, for 120,000 cars and more than 500,000 people. Fares will go up by 5 per cent. on average, but there will be some lower rates for off-peak travel.

Special discounts on accommodation at 10 top British Transport hotels are to be offered to Motorail customers who will be able, for the first time, to purchase Motorail travel on credit.

These changes follow a major marketing exercise which has identified more clearly the areas of greatest public demand. A few services, the exercise has disclosed, are far from being commercial propositions and these will be withdrawn next year.

The four new services will be: Stirling-Dover—to meet growing calls from Scotland for direct connections with the Channel ports and with BR's Sealink car ferry and Seaspeed hovercraft services.

London (Kensington) - Carmarthen—to provide for the popularity of West Wales as a holiday area.

London (Kensington)-Carlisle (overnight)—as an addition to the present daytime service for tourists bound for the Lakes and Southern Scotland.

Birmingham (Sutton Coldfield)-Inverness—providing a new link between the Midlands and the Scottish Highlands.

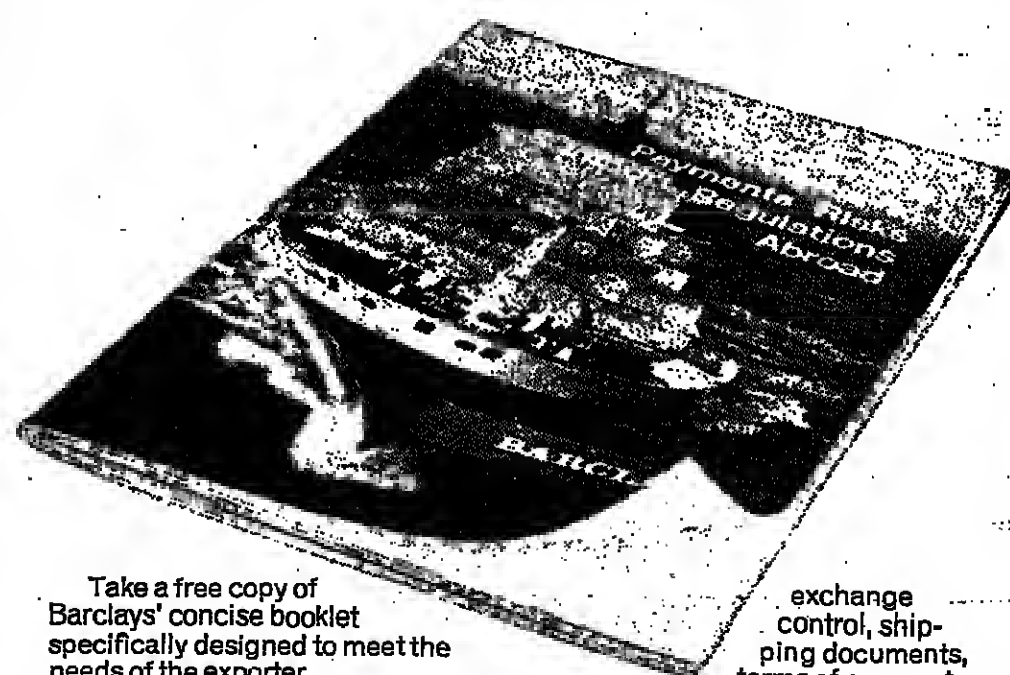
The Stirling-Dover service will eliminate a 1,000-mile round drive, leaving Stirling at 8000 hours on Fridays and Saturdays to reach Dover Marine at 0725 on Saturdays and 0840 on Sundays. There will be 16 car spaces available in each direction each night.

Larne car ferry

On the Kensington-Carmarthen run there will be a train every day except Sundays, with refreshment car facilities. The Kensington-Carlisle service will run northwards on Mondays and Wednesdays, returning on Tuesday and Thursday nights. An arrival time of 0530 in Carlisle will give visitors to Ireland the chance to catch the 1100 of the Stranraer to Larne car ferry.

The Sutton Coldfield-Inverness service will run once a week—northwards on Monday nights and back on Tuesday nights. The York-Newcastle-Inverness service will revert to three trips a week in each direction. The Sheffield-Newton Abbot service will lose one run a week with trains running westward on Friday and Sunday nights and back during the day on Fridays and overnight on Saturdays. Travelers will also have a special week-end service on this route.

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The List of Applications will open at 10 a.m. on Wednesday, 13th October, 1971, and close on the same day. This issue is made in accordance with a General Consent given by the Treasury under the Control of Borrowing Order 1958. Application has been made to the Council of the Stock Exchange, London, for permission to deal in and for quotation for the Stock being issued.

CITY OF CARDIFF

Issue of
£5,000,000 Cardiff Corporation
7½ per cent. Redeemable Stock 1977

Authorized by Resolution of the Cardiff City Council dated 27th September, 1971 and by the Local Government Act 1958 and the Local Authorities (Stock) Regulations 1958 and 1962 and the Consolidated Loans Fund (Cardiff County Borough Council) Scheme 1967

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On 15th November, 2098	£25	per cent.
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On 15th November, 2100	£25	per cent.

Interest (less income tax) will be payable half-yearly on 15th May and 15th November. A first interest payment of £227½ (less income tax) per £100 Stock will be made on 15th May, 1972. The Stock is an investment falling within Part II of the First Schedule to the Trustee Investments Act 1961.

NATIONAL WESTMINSTER BANK LIMITED, New Issues Department, P.O. Box No. 79, Drapers Gardens, 12 Throgmorton Avenue, London, EC2P 2BD, is authorized to receive applications for the above amount of Stock, in accordance with a Resolution passed by the Cardiff City Council on 27th September, 1971.

1. **Securities**—The Stock and interest thereon will be secured upon all the rates and levies of the Corporation. The Stock will rank pari passu with all other stocks and loans issued or to be issued by the Corporation.
2. **Provision for Redemption of Loans**—The Council is required by Acts of Parliament and by the Consolidated Loans Fund (Cardiff County Borough Council) Scheme 1967, to make annual provision towards redemption of loans raised for capital expenditure and to make such provision in connection therewith as may be required by the Secretary of State for Wales.
3. **Purpose of Issue**—The proceeds of the present issue of Stock will be applied to replace monies temporarily borrowed to meet authorized capital expenditure, to replace maturing debt, to finance further capital expenditure on authorized capital schemes and to defray the costs, charges and expenses of and incidental to the issue of the said Stock.
4. **Redemption of Stock**—The Stock will be redeemed at par on 15th November, 1977, unless previously cancelled by purchase in the open market or by agreement with the Council.
5. **Registration**—The Stock when fully paid will be registered and transferable free of charge in amounts and multiples of one penny by instrument in writing in accordance with the 1967 Act and the Consolidated Loans Fund (Cardiff County Borough Council) Scheme 1967. National Westminster Bank Limited, Registrar's Department, 30a High Holborn, London, WC1V 7DA, is authorized to receive applications for the above amount of Stock, in accordance with a Resolution passed by the Cardiff City Council on 27th September, 1971.

6. **Interest**—Interest (less income tax) will be paid half-yearly on 15th May and 15th November, by warrant, which will be sent by post at the Stockholder's risk. In the case of a cheque, the Council will be responsible for the cheque being cashed in the account unless instructions to the contrary are given in writing.
7. **Application of General Arrangements**—Applications on the prescribed form, accompanied by a deposit of 10p per cent. of the nominal amount applied for, will be received at National Westminster Bank Limited, New Issues Department, P.O. Box No. 79, Drapers Gardens, 12 Throgmorton Avenue, London, EC2P 2BD.
8. **Applications must be for a minimum of £100 Stock or in multiples of £100 for applications up to £2,000 Stock.**
9. **Larger applications must be made in accordance with the following scale:**
Applications above £2,000 Stock and not exceeding £5,000 Stock in multiples of £1,000.
Applications above £5,000 Stock and not exceeding £10,000 Stock in multiples of £1,000.
Applications above £10,000 Stock and not exceeding £20,000 Stock in multiples of £2,000.
Applications above £20,000 Stock and not exceeding £50,000 Stock in multiples of £5,000.
Applications above £50,000 Stock and not exceeding £100,000 Stock in multiples of £10,000.
Applications above £100,000 Stock and not exceeding £250,000 Stock in multiples of £25,000.
Applications above £250,000 Stock and not exceeding £500,000 Stock in multiples of £50,000.
Applications above £500,000 Stock and not exceeding £1,000,000 Stock in multiples of £100,000.
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Applications above £2,500,000 Stock and not exceeding £5,000,000 Stock in multiples of £500,000.
Applications above £5,000,000 Stock and not exceeding £10,000,000 Stock in multiples of £1,000,000.
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SINGLE JERSEY KNITTING

The Financial Times will publish a survey of Single Jersey Knitting in its issue of Wednesday, November 24. The following indicates the proposed editorial content.

1. Introduction. What is single jersey? Circular and flat knitting. What markets it serves. How it competes with woven fabric and double jersey. New techniques which are opening up under applications. Cost comparisons with competitive fabrics. Importance of single jersey to synthetic fibre manufacturers. Comparison with continental and U.S. markets for single jersey. Likely future in U.K.
2. Structure and Design of Single Jersey Fabrics. What the latest advances mean in meeting competition in terms of production costs, product quality and consumer appeal.
3. Manufacture of Single Jersey Fabrics. How single jersey knitting looks as a commercial proposition to a group engaged also in double jersey, worsted and woollen fabrics.
4. Laminating Single Jersey. The advantages and the cost of laminating. The trend towards "after-dyeing" techniques.
- 4b. Colour Printing.
5. The Outlook for Fibres. Importance of acrylic and polyester fibres. Comparison with U.S. and continental markets. Strongest suppliers in U.K. Trends in demand for various types of fibre. Trends in developing modified fibres for single jersey applications.
6. Machinery. The world market for circular and flat single jersey knitting machinery. Recent trends.
7. Making-up in Single Jersey.
8. The Retail Trade in Single Jersey.

Japan's steelmakers may soon dominate bulk cargo freights

By JAMES McDONALD, SHIPPING CORRESPONDENT

A REPORT suggesting that Japan may be the world's biggest steel-maker by 1980, generating about 75 per cent of the demand for sea transport of iron ore and coal and therefore having a dominant influence upon the level of bulk cargo freight rates, has been produced by Maritime Transport Research, part of the U.K. Shipbuilders' and Repairs' National Association.

The report is disturbing, not because Japan as a particular nation, may become the dominant influence, but because it would seem to be unhealthy for world seaborne trade generally to be so dependent upon the fortunes or misfortunes of any giant industrial nation.

The Maritime Transport Research Report—68 pages of fairly readable summaries of statistics, graphs and conclusions offered to subscribers at £80 per copy—is titled *The Sea Trade in Iron Ore and Coal*.

Starting from the basis that there are to-day only four major steel producing areas—Western Europe, the U.S., the U.S.S.R. and Japan—the report says that each produces about 100m. tons of steel per year but with only western Europe and Japan importing iron ore and coal on a large scale.

On an "A to Z" basis, the conclusions of the report go on to say:

1—By 1980, world demand for sea transport of both iron ore and coal should more than double.

2—While European imports of iron ore are likely to grow by over 50 per cent by 1980 and of coal by over 35 per cent, "Japanese imports of iron ore and coal are likely to grow by over 160 per cent by 1980."

3—Japan is now the most efficient steelmaker in the world and may be the highest by 1980: its steel production grew at the rate of 16 per cent per year in the 1960s and may average about 10 per cent a year in the 1970s.

4—The current Japanese recession is no more than a "hesitation" between two long-term growth periods.

Stressing the importance of iron ore and coal in the world's bulk seaborne trades, the report's conclusions point out that—in the context of total dry cargo ton-mile demand, iron ore and coal represented 25 per cent of the dry cargo total in 1960, 33 per cent in 1964 and 39 per cent in 1968. By 1975 the study forecasts that the Japanese proportion will have risen to 50 per cent and by 1980 to 55 per cent, effectively controlling "the whole market."

The conclusions are based on a considerable number of statistics from many sources and the report stresses that its forecasts are not firm estimates but no more than an indication of trend over a period of time. For example, it is assumed that the Suez Canal will be open by 1975.

However accurate the forecasts may turn out to be, there is no doubt that already Japan's economy and its demands for oil, ore and coal already have a near-dominating effect upon the world's seaborne bulk commodity trades.

Over the past year a decline in demand by the Japanese for oil and for other bulk commodities has led to a considerable recession in the world level of tramp freight rates for tankers and dry-bulk carriers.

Changes in S. Wales overseas trade

By Our Own Correspondent

CARDIFF, OCT. 10. IMPORTANT MOVEMENTS have been taking place in the import and export trade of South Wales. Returns for the first nine months of the year by the British Transport Docks Board show that iron and steel imports, at 227,000 tons, were cut by almost half, while exports were over 1m. tons, a rise of a third compared with the corresponding period last year.

A record 5m. tons of iron ore was imported for steel works. There has also been a continued rise in Australian and American coal imports for power stations and steel works.

Imports were 1,15m. tons, while exports at only 970,000 tons were 25 per cent below last year.

Coal imports this year have substantially augmented the stocks held by power stations. They represented 9.5 weeks' consumption in mid-September, against 7.6m. tons a year ago, and the undistributed stock held by the National Coal Board were 9.7m. tons, almost the same as a year ago.

Steam specials 'worth £250,000 to Rail Board'

STEAM TRAIN "specials" are worth £250,000 a year to British Rail, said Mr. Peter Prior, managing director of H. P. Bulmer, the elder company which runs the 44-year-old King George V engine. It arrived back at the week-end at Harford after an eight-day trip including Oxford, London, Birmingham and Swindon.

A British Rail spokesman said earlier that they were "reviewing our ban on steam and there could be a change now that this tour has gone so well."

BR said the George V was the only steam locomotive still owned by the Board. Others had gone for scrap.

Ulster Republicans study plans for Stormont's rival

By DOMINICK J. COYLE, DUBLIN CORRESPONDENT

MONAGHAN, OCT. 10.

MILITANT REPUBLICANS and political activists from many parts of Northern Ireland have been meeting here to plan the establishment of the new Ulster Parliament (Dail Uladh) proposed by the army council of the IRA Provisionals.

The meeting, which took place in St. MacArtan's Hall here in Monaghan, within six miles of the border was discreetly "supervised" by Irish Police and Special Branch officers drafted into the area in recent weeks.

Less than 20 miles further down the road towards Cavan Town, where Northern Ireland territory juts across the highway for little more than 1,000 yards, British troops had set up a road block, no doubt aimed at capturing any leading IRA men travelling to the Monaghan convention.

On the road, some 30 miles east of the town, Irish Police and army personnel also manned several road junctions, presumably as part of an advance guard for Mr. Jack Lynch, the Irish Prime Minister, who was travelling to Dundalk to speak at the national convention of the Junior Chamber of Commerce.

To complete the picture, and certainly to compound the confusion for outside observers, Monaghan's Western Hotel was the venue for a "peace conference" on Ulster convened jointly by an Irish priest and a north of Ireland clergyman.

Newsmen covering the Irish crisis for the past couple of years have to move pretty fast at the best of times, but since Saturday's peace conference and the Dail Uladh convention were inconveniently scheduled for the same time, I settled somewhat cautiously for the latter. That, I now suspect, was a mistake.

If leading IRA men turned up at St. MacArtan's Hall, they successfully managed to conceal their identity. The very attractive and obviously English

(from the recent and "mod" gear) secretary checking the credentials of the arriving delegates sought no verification of my own status. On the contrary, he seemed more than a little impressed that the Financial Times should have come to witness the proceedings.

These proceedings—or at least the public session open to the Press—were harmless in the extreme. Certainly Mr. Brian Faulkner and his government colleagues at Stormont can have little immediately to worry about if this convention represented the extent of the Dail Uladh challenge on the political front.

Mr. Frank McManus, one of the Northern Ireland MPs at Westminster, explained that Dail Uladh was a proposal to establish a regional parliament for the nine counties of Ulster as a first step towards a new governmental structure for the whole of Ireland—under a new federal administration in Dublin, but not the present Lynch Government.

It would have a democratically elected assembly representative of "Catholics and Protestants, Orange and Green. Left and Right." In a nutshell, it was proposed as an Ulster parliament for the Ulster people.

Standing in

To be quite fair to Mr. McManus, he did explain that he could not tell us very much since he was only standing in (at 10 minutes' notice, he claimed) for Mr. Paddy Kennedy, the Northern Ireland Republican/Labour MP at Stormont who had been on a tour in the United States collecting money and who was, apparently, currently on his way by road from Shannon Airport to Monaghan. He, incidentally, had not made it here before I departed for pastures new—both orange and green—further along the frontier line.

Mr. Peadar Mac Gathain, the new full-time secretary of the Dail Uladh movement, who democratically disclosed to the 100 or so delegates attending "from all parts of Ulster" that his salary was £10 a week, reported on the committee's work in co-ordinating the civil disobedience campaign in the north, on the temporary loss of two Northern Ireland delegates as a result of their internment, on the drafting of a constitution for Dail Uladh and, finally, on the finances of the movement. Funds, in fact, seem rather meagre, since only £520 has been collected or contributed since the movement was first launched in August.

The draft constitution was introduced by one of its authors, Mr. Rory O'Driscoll, president of Sinn Féin (Kevin Street), the political wing of the IRA. "Provisionals" and he told delegates that a preliminary memorandum on structure, including details on how the movement intended winning popular support for the proposed parliament, would be discussed later, when the Press had departed.

Meanwhile, Mr. O'Driscoll emphasised that Dail Uladh should grow on a gradual basis by being promoted in towns and villages, in factories and in blocks of flats, eventually blossoming forth into a full-scale provincial assembly.

Mr. Mac Gathain admitted having written to a number of (unnamed) people about the proposals, but he had had no detailed replies. It seems, to quote his own words, that the Dail Uladh concept is "too new and too revolutionary." But there had been some encouraging support in general terms, and they would all be back again here in Monaghan on October 30 for a full-dress convention at which time, I gathered, even the Press might be told all.

Considering the obvious and deadly effectiveness of the IRA Provisionals on the streets of Belfast and elsewhere in Northern Ireland in recent months, I could not but think that the movement must be capable of mounting a much more efficient and effective political show than we witnessed here. On the other hand, Saturday's convention left unanswered the main question as to whether the Provisionals are really actively promoting the Dail Uladh idea, or merely operating on the fringes of a political movement being developed by others.

'More than 80 Tory promises fulfilled'

By ELSETH GANGLIN

THE progress made by the Conservative Government in fulfilling "more than 80" of the promises made at the time of the last General Election is traced in a booklet, *Year of Achievement*, published to-day by the Conservative Central Office.

Prices were still rising too fast. "But for the first time since Labour devalued the pound in 1947 there are clear signs that the tide of cost inflation is being turned back."

Unemployment was still too high. "But for the first time in years the economy is set firmly on a course of expansion."

Social blackspots

There were still too many social blackspots, although policy priorities were being straightened out to bring effective action on the worst problems.

Taxes were coming down; the pound was strong, with reserves standing at record levels. Debts were being repaid; the Bank Rate was lower than at any time since the last Conservative Government had left office. People were saving more; the decline in the housing programme had been

checked. The number of strikes had started to fall. The Industrial Relations Act had been passed. The machinery of government had been modernised. The burden of State spending had been reduced, and a completely new pensions scheme. The transition to an expansionist agricultural policy had started.

"Detailed proposals have been announced for the biggest reform and simplification of taxation this century; for a long and detailed account of the fulfilled promises."

A Year of Achievement, Conservative Central Office, 32 Smith Square, SW, 15p.

"No sign of sustained growth plan"

THERE is no sign that the Government has evolved a method for ensuring sustained growth. On present evidence, the current move towards expansion seems unlikely to prove more solidly based than that of 1963-64.

This is claimed in a memorandum published by PEST (Pressure for Economic and Social Torment), written by Prof. D. Hague, Manchester Business School, and Mr. Nicholas Scott, of which is signed by 12 Conservative backbenchers and four academic economists, among others.

Recent measures would increase the rate of growth and reduce unemployment, but they were not effective for maintaining the balance of payments surplus or reducing the rate of price increase, it is suggested. Unless price inflation could be slowed down, a satisfactory surplus on the balance of payments at the current exchange rate would be attainable only if there was unacceptably high unemployment and slow growth.

If price inflation were to be slowed down, the CBI initiative had to be reinforced by a mechanism to slow down increases in incomes. This autumn would be a good time to try to introduce an incomes strategy. A largely voluntary policy with some minimal long-stop provision was likely to achieve the best mix of acceptability and effectiveness, the memorandum stresses.

It would need to be agreed that wages and salaries would be below an agreed percentage of the GNP, leaving room for sufficient profit to make the investment necessary for sustained economic growth. The position of the genuinely low-paid would have to be improved, relative to the remainder of the population. Some version of the TUC's suggestion regarding "threshold agreements" should be included. If her father has a large income, her grant is reduced even a modest income was no longer then opt for exchange rate flexibility.

Government 'victimising' married women students

By MICHAEL DIXON, EDUCATION CORRESPONDENT

THE GOVERNMENT has been accused of victimising married women students whose husbands go out to work by the National Union of Students.

These women are the only students among the 500,000 in this country who do not receive a rise in their grants at the start of the new academic year. Their case is to be discussed tomorrow by the Women's National Commission of which Mrs. Margaret Thatcher, Secretary for Education, is co-chairman.

An NUS spokesman said yesterday: "No matter how little their husbands earn, these women are treated as 'privileged students'."

student living at home is £245 and single students living away from home can receive up to £275.

If a student marries and her husband is working during her course or while she is under 21 her grant continues to be assessed on her father's income. If her father has a large income, her grant is reduced even though her father may no longer be giving financial help to her and her husband. If her father's income is low, her grant falls anyway from what it was previously at the £275.

The NUS tried to win an increase for married students with working husbands, during the grants negotiations last spring. But this increase was refused as a matter of Government policy, the union spokesman said.

Concern at electricity bad debts

By Our Own Correspondent

DERBY, OCT. 10. BECAUSE OF the increasing number of bad debts, more and more electricity consumers in the East Midlands are being asked for references before supplies are provided.

The measures have been announced by the East Midlands Electricity Central Council, which said that the mounting number of bad debts was causing concern. A warning was also given that too many people were delaying payment of accounts and that stronger measures would be taken against them.

Of the bad debts, the council said: "This is a national trend which stems mainly from the fact that more and more people are moving their homes, often without informing the Board."

To reduce these debts, the Board is now requesting references from new consumers in those cases where the persons concerned are not previously known to the Board.

"Where references or other evidence of credit-worthiness can not be obtained, the Board is applying more rigorously its policy of seeking deposits against payment of the future account."

Driver blamed for Scottish train crash

The driver of a passenger train which collided with another out of Glasgow Central Station, injuring two passengers, has been blamed for the accident. He is Mr. Thomas Hetherall. In his case, the accident Major C. E. Rose, Ministry Inspector of Railways, clears the signalling system at the station.

The accident happened on October 19 last year, when a Glasgow to Glasgow train, driven by Driver Hetherall, passed two signals at danger and collided with the side of a Glasgow to Glasgow train.

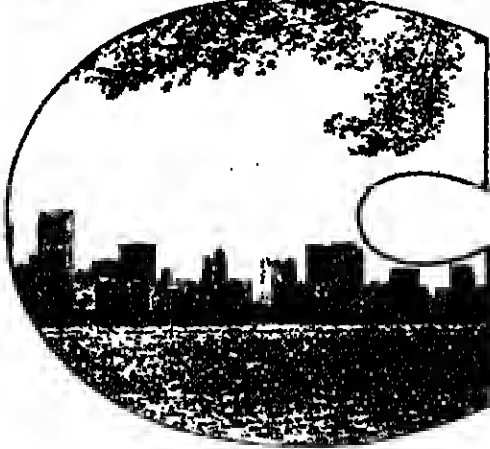
The inspector says driver Hetherall did not pay proper attention to the signals. The current signalling failure at Glasgow Central is not significantly higher than at other comparable installations and such failures as do occur are not such as to affect in a dangerous manner the relay interlocking at the point and signals.

JOHN K. GILLIAT APPOINTS AGENT FOR NIGERIA

John K. Gilliat and Co., the export merchant and confirming subsidiary of merchant bankers Arncliffe Latham, has appointed an African Export and Import Company as sole agent to import and export goods to Nigeria.

Gilliat has arranged an initial credit of £1m, which will be made available to Nigerian buyers on a short or medium term basis according to the value and category of the goods.

For you, America's most important city is not New York.



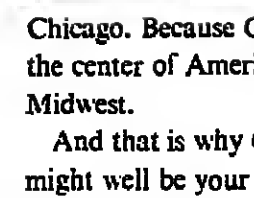
New York is a great city. But you might be surprised to learn that it is not America's production capital. Chicago is. And Chicago is also the center of America's export industry. It is also America's trade and transportation capital. And America's convention capital.

Chicago has the world's busiest airport. It is the world's largest inland seaport. It houses the world's biggest convention center. And, in the very near future, the world's tallest building will loom above the Chicago skyline.



Now, we are not trying to downgrade New York. (Far from it, we have a major banking facility of our own right in the heart of Manhattan.)

What we are trying to do is make a point about Chicago. And the point is that, when it comes to big business, nobody is bigger than

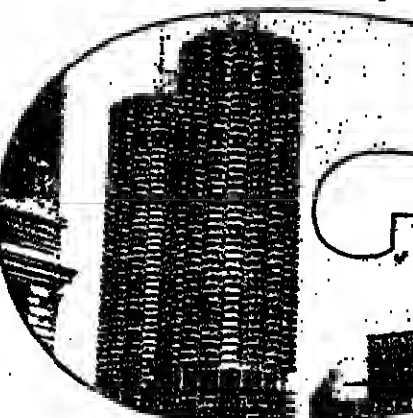


Chicago. Because Chicago is the center of America's vital Midwest.

And that is why Chicago might well be your most important market.

If you want to deal with this vital market, the way to do it is with the

Continental Bank. We are the leading bank in the production and export center of America. We are one of the most important international banks in the world. And, founded in 1857, we are the oldest bank in Chicago. Through our London branches, we can help you in the successful development of the highly competitive American market through our intimate knowledge of the local business community.



We can help you in obtaining and analyzing reliable credit and market information. We can help you establish business and marketing goals. We can help you tailor your working capital needs to your own particular requirements. We can help you in your short- and medium-term financing needs. We can help you handle

letters of credit, collections and remittances quickly and efficiently.

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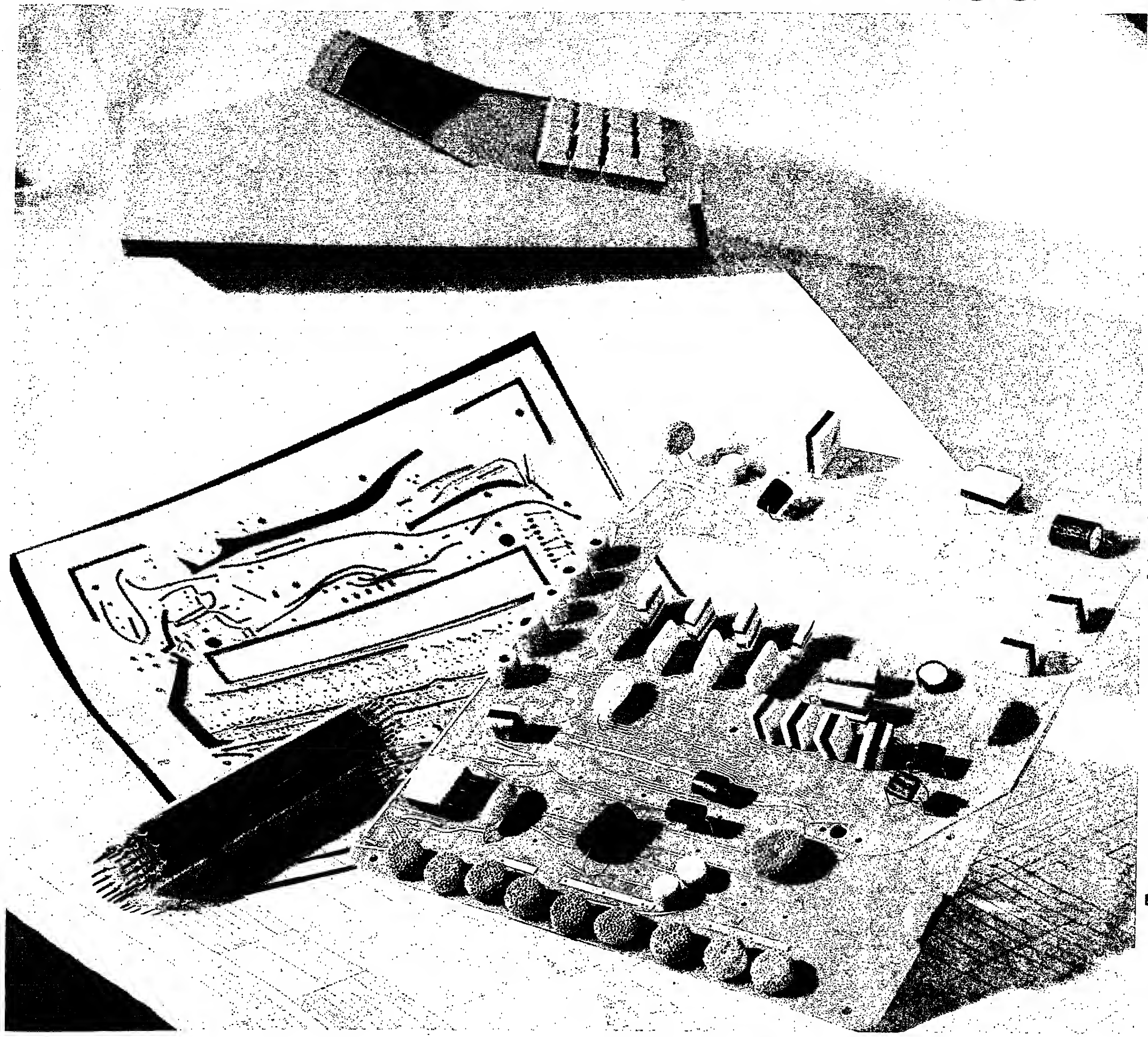
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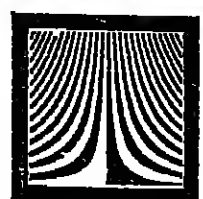
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The Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

ELECTRONICS

Aid to component quality

AN ION implantation facility at Mullard Research Laboratories is assisting semiconductor research. First operational towards the end of 1968 it is being extended and developed.

Conventionally, selected impurities are introduced into a slice of the semiconductor material through apertures in a mask when the slice is exposed to appropriate vapour in a diffusion furnace. Penetration, concentration, definition and composition are controlled by furnace conditions.

With ion implantation, the impurity is introduced into an "ion source" from which a beam of positively charged ions is extracted. This beam will contain ion species other than the main dopant, and after electrostatic acceleration to a well-defined energy, the ion species are sorted out by a firm of "magnetic prism" into separate beams, any one of which may be selected for implantation.

Apparatus at MRL is based on an isotope separator by Daeyik

of Denmark, and is used primarily for Mullard semiconductor research programmes although it has been possible to offer limited assistance to universities and research centres in the U.K. as well as in Europe and in the U.S. Species can be implanted at energies up to 200 keV, at temperatures between 77 and 800 degrees absolute and with a wide range of incident angles.

The advantages of implantation include more precise control of the purity, uniformity, definition and penetration of the dopant, and more freedom to select the dopant concentration in a way which is not possible with conventional thermal diffusion. There are many possible applications for ion implantation, outside the field of semiconductor. The technique can be used where the basic property of a material needs to be changed by the precise introduction of atoms through or onto the surface of the material to a depth of a fraction of a micron. Meanwhile, the company has

begun to market a clear wide-angle display that can be easily read under unfavourable lighting conditions based on new alphanumeric indicator tubes.

These are cold-cathode glow-discharge devices that present an extremely wide range of characters—anything stored in a read-only memory, which includes most of the characters on a typewriter as well as several mathematical symbols. Measuring only 19 x 12 x 5 mm, they are smaller than the conventional glow-discharge tubes which can show only a limited number of characters.

They are formed by the selection of dots in a planar array of 7 x 5, each dot being the negative glow near a cathode recessed below the glass surface; decimal points are formed by other dots not part of the planar arrays.

Information on both the ion implantation service and the new displays can be obtained from the company at Mullard House, Torrington Place, London, WC1E 7HD.

MATERIALS

Smooth skin ceramic

AN ALUMINA ceramic substrate with "as-fired" surface finishes of 5 microinches centre line average, and typically of 3.5 microinches, is available from Pilkington.

Its flat and smooth surfaces, which cut out the need for polishing, allow the deposition of sophisticated circuitry. Closer and better line definition and continuity right to the substrate edge are possible.

The substrate is marketed in the U.K. and Western Europe by Chance-Pilkington and a first order has come from an international European electrical engineering company for substantial quantities for large-scale testing. The substrate is manufactured by a new patented process developed at a cost of £350,000 by the Canadian firm Duplata, a Pilkington associate company.

In the process the aluminium oxide dough is continuously rolled to obtain a polished sheet before firing. "Electron" microscopes show the crystal faces forming a flat mosaic-like pattern with the individual grains in intimate contact.

The standard thickness tolerance of the substrate is plus or minus 0.003 inch. Camber is a maximum 0.004 inch per inch. A better thickness tolerance of 0.001 inch and a camber maximum of 0.002 inch per inch are also available.

Suitable for a wide range of electronic microcircuitry, the substrate is 99.7 per cent aluminium oxide. Its flexural strength is 50,000 psi and it has a thermal conductivity of 0.078 e.u. units at 25°C. It is intended mainly for thin film work but is suitable for thick film processes where high density circuits are deposited.

AUTOMATION

Textile process control

RECENT developments in the textile industry foreshadow even faster expansion for the man-made fibres industry, and the companies which supply it with highly specialised machinery and equipment.

Fielden Electronics of Paston Road, Wythenshawe, Manchester, M22 4TX, a member of the George Kent Group, expects to increase its share of control instrumentation in textiles by the introduction of flexible data logging system for yarn processing machines such as draw twisting and texturising units. Its introduction is in keeping with the constant improvement in yarn quality and machine efficiency in this industry.

The system consists of a series of units which can be selected and supplied in a single console form to suit the specific applications. Some of the units already available include reed relay scanner modules, analogue and digital off-limit modules, compensating and linearising modules for resistance bulb and thermocouple inputs, a digital voltmeter module, ends down and spinner speed modules, clock and calendar modules, various printer drive modules and print suppression modules.

A third piece of equipment will take the contents of a cassette and transmit it to a computer for immediate use. Thus, Rank is offering all the elements of a point-of-sale data capture and processing system.

The company is providing, besides the hardware, a payment arrangement whereby charges are made according to the amount of use of the units. A meter mounted in the Encoder keeps track of what is owed to the manufacturer.

Block and Anderson have moved into the microcomputer field with a compact machine having a version of Cobol as its programming language and a cycle time of 1.2 milliseconds. Bandata 4200 can be used with an exchangeable disc backing store with a maximum capacity of more than 5m. bytes.

Business Computers have moved out of the Sadie/Susie

Corrugated boxes can be produced at speeds up to 13,000 an hour on this machine, installed in Ashton Containers' new factory at Livingston, Scotland. The machine was built by the Container Machinery Division of Henry Simon.

Although primarily designed for the textile industry, the system is expected to find applications in many other industries logging extrusion head temperatures, mix temperatures in the food industry, and battery life testing.

The 300 series data logger measures and records parameters such as temperatures, machine speeds, ends down (broken yarn) etc. All parameters can be recorded, or only those in error can be recorded continuously, at regular intervals, or on demand. Observation of the recorded parameters allows adjustments and corrections to be made quickly when a fault occurs so that top quality yarn can be re-established without delay, minimising spoilage. This contrasts with the existing method of checking where for instance each spinner speed is measured individually by hand.

Since there might be 100 spinner units on just one machine a considerable amount of spoiled yarn can be produced before an incorrect spinner speed is observed.

SEVERAL leading manufacturers have bided back a number of interesting products either to unveil them at the Business Efficiency Exhibition proper, or as near to the time of the event as possible.

One unit the Rank Organisation has been keeping up its sleeve since it took over English Numbering Machines late in 1970 is a piece of equipment intended to capture data, either at point of sale or at any point most convenient to the user, and transform it without delay into computer-processable information.

"Encoder" is the name given to the unit which gives the user virtually a free hand in deciding the format of the information and the contents of the format. Output of the device is on a magnetic tape cassette which can contain about enough for a full day's work for one operator.

Working with this unit is a reader/pooler, which completes the cycle of capture and processing of information on a computer tape at speeds of 85,000 characters in around 24 minutes. It has facilities for error correction and like the preceding unit can be rented from the company.

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Designed by the team which did the initial work on the first magnetic card cash dispenser is the Dataplex, a machine which uses magnetic card technology to speed up report writing, the production of personalised letters, the completion of company forms for customs and other purposes.

It is built up from an input/output typewriter connected to a desk-top unit which houses electronic logic and two magnetic card readers.

Information entered at the keyboard is simultaneously captured and entered on the cards. Subsequent operation of the set to turn out high-grade copy is automatic and controlled by programs selected and run according to standard instructions easily understood by any competent typist.

This is only the first of a family of machines that Dataplex—which operates from 170a, Oak Road, Croydon, Surrey—is contemplating. Prototypes of other machines to transform, transmit or otherwise operate on business information are nearing completion and such is the interest of overseas companies that already 100 of the first unit have been ordered by a Dutch company.

Probably the most attractive feature of the new equipment is the ease with which it permits absolutely error-free documents to be turned out.

IBM links in System/3

ANTICIPATED for some time, the possibility of using IBM's small business computer, System/3, as a stepping stone to the larger machines of the 370 range has now become an officially endorsed fact.

The company has announced a series of extra facilities and equipment to go with the small machine, offering extra compatibility between it and its bigger models with data rates from 30,000 to 80,000 bytes per second, and making transition from the one to the other less painful for the user.

The small unit will in future be able to carry out batch and on-line processing simultaneously to the controller which has its own system just announced, but a bit fault location.

Small scrap baler

ENGINEERING concerns engaged in the manufacture of light gauge stamped metal articles and extrusions are frequently left with quantities of scrap metal which accumulate to create a nuisance whilst not being sufficient to necessitate a normal hydraulic baler.

For such companies, the Planters division of Entwistle and Gass, of Bolton, has introduced an improved version of its Befast baling press costing less than £1,000.

An electrically operated screw-driven press, measuring 3 feet by 11 feet by 4 feet, it forms bales measuring 12 by 12 by 9-12 inches. A feature of the unit is that side compression is achieved automatically at the end of the first stage of compression.

Computers

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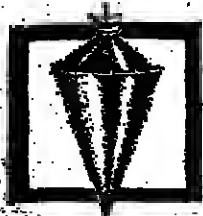
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Building and Civil Engineering

Wates wins £4½m housing job

FIRST phase of the London Borough of Southwark's Rouse development, worth £4½m, is to be undertaken by Wates.

Some 779 dwellings are to be provided in 33 low-rise blocks to be erected in the Wates "M" system of concrete wall construction, cast with steel tunnel shutters and finished with external brickwork and pitched tiled roofs.

Eventually the scheme will include 1,429 dwellings built by Wates. Housing unit sizes vary between one- and eight-person

units and old people's flats and flats, a children's home, 15 shops, a meeting hall, a play group room, library and lockup garages for 325 cars are also to be provided.

Heating will be supplied by a central boiler, already built, to Southwark Borough Council has commissioned landscape architects to prepare courtyard and amenity areas.

The buildings will generally face on to these areas and a market square is to be created into which existing market traders will move.

Edinburgh offices over tunnel

ON a site over a British Railways main line tunnel, at Canning Street, Edinburgh, a 5-storey block of reinforced concrete framed offices is being built for Caledonian Terminal Investments.

A £390,000 contract awarded to G. Percy Trentham calls for the 60,000 square feet building to be finished by early 1973. The foundations are piled and the cladding is of exposed aggregate panels.

Another contract, worth £320,000, has been awarded to the company for buildings for the Royal Engineers Training Brigade on a site near Hawley Lake, Hants. This involves nine single-storey brick-built buildings, including workshops, a steel-framed host shed and a boiler house.

In addition, an access road of about 1½ mile length and various hard standings and general site works are included.

awarded by the Department of the Environment. Designed by the Building Design Partnership, the scheme should be finished by February 1973.

Three contracts for work in Lancashire totalling £440,000 have also been received. The largest job is for a five-storey block for the Lex Property Company to be constructed in reinforced concrete.

Designed by Robin Clayton, the building in Albert Street, Eccles, is scheduled for completion next June.

In Leyland, Preston, GA is building a distribution depot for Berkely Hamilton worth £170,000, next to which a road is to be laid for Bridges Transport.

In Scotland, Gilbert Ash is building an office block and workshop at Motherwell, for Securitor, under a £130,000 contract.

Largest firemen's college

THREE contracts, together worth £1.5m, won by Epsley-Tyas, of Evesham, Worcs., include one for the completion of phase 3 of the Fire Services Technical College at Moreton-in-Marsh, Glos.

This £663,000 negotiated contract with the Department of the Environment also includes the building of a motor transport workshop and garages with space for 21 fire fighting appliances.

A sports hall and recreation facilities are also to be provided under the contract, which is believed to be for the largest fire training centre in Europe.

Two tendered contracts won by Epsley-Tyas call for the erection of a £490,000 three and four-storey group switching centre at Hereford for the DoE, and a £390,000 new Divisional Police headquarters at Shrewsbury for the West Mercia Police Authority.

Three jobs for Tarmac

EXTENSIONS to the Leeds premises of Containerbase (Leeds) are to be erected under a £180,000 order awarded to Tarmac Construction.

Concrete paving of between 8 and 11 inches thickness is to be laid on a granular base. The job also includes 700 yards of drainage and 700 yards of fencing. Consulting engineers are Robert Walpole and Partners.

Lowe and Fletcher has placed a £87,000 contract with Tarmac Construction (Midlands) for a two-way extension to its Telford New Town, Salop, factory. An 18,000-square-foot production area, toilets, first-aid room and a loading dock are involved.

The 200-foot-long by 54-foot-wide building will have a structural steel frame with pvc-coated steel sheet cladding. At Charles Street, Leicester, the company is to carry out a £150,000 contract for Reuslade Investments, to refurbish a five-storey warehouse as offices.

Extensions to Ulster University

A FURTHER phase of the new University of Ulster at Cromore Road, Coleraine, is to be carried out by the Gilbert Ash division of Bovis.

The £950,000 contract mainly concerns a 3-storey reinforced concrete framed structure with precast concrete floors to provide a science block and two lecture theatres. A single-storey diamond-shaped building in structural steel is also called for as well as roads, drainage and other ancillary work.

At Aldershot, the company is building a steel-framed catering centre for the Army Catering Corps under a £315,000 order

Extendible factory

WORK recently started on the construction of a 25,700 square feet advance factory at North Seaton, Ashington, Northumberland, for the English Industries Estates Corporation by Purdie Lumasden & Co.

The £127,000 contract is to be finished by early next summer and the factory could provide jobs for at least 100. Sufficient land has been reserved to allow the unit to be extended up to a total area of 100,000 square feet.

McAlpine schemes in Shropshire

LARGEST of four schemes in Shropshire, totalling £1.5m, being undertaken by Sir Alfred McAlpine and Son, concerns the

erection of 262 flats of traditional construction at the Brookside Estate for Telford Development Corporation.

The contract, worth £227,000, also includes the provision of external services, roads and sewers, and is due to be finished by July 1973.

Another job for Telford, valued at £170,000, calls for the building of eight factory units in two single-storey blocks at Halesfield. To be steel-framed with brick walls, the blocks will have asbestos roofs, and should be completed in June next year.

Allied Suppliers has awarded McAlpine a £500,000 order for a 413 by 209 foot warehouse. Also situated in Telford, the warehouse will have brick and metal walls and an asbestos roof.

There will also be an office block measuring 240 by 21 feet, to be of brick construction with a metal roof.

Designed by Sidney Kays Eric Firmin and Partners, the scheme is to be finished next June. The fourth contract is for the extension of a cheese store, together with a compressor room, at Ruyton, Eleven Towns for Express Dairy Company (London).

Hall gets Covent Garden services contract

ENVIRONMENTAL control systems for the new Nine Elms Covent Garden vegetable market at Wandsworth, London, are to be installed by Matthew Hall Mechanical Services.

The £1.3m contract includes the installation of air conditioning, heating, ventilation, hot and cold water, sanitation, plumbing and fire protection services in the main three-acre open-plan flower market.

Over 4,700 sprinkler heads will be used to cover 96,700 square feet of sales space, 12,500 square feet of auxiliary trading and storage areas and a basement car park for 350 vehicles.

Air conditioning to the trading

hall will be by means of low-velocity trunking and diffusers. Chilled water will be provided by two refrigeration plants with capacities of 600 tons each, and the plant will have an air handling capacity of around 330,000 cfm.

A central boiler house will supply low-pressure hot water heating for the entire market. The fruit and vegetable market, comprising two trading buildings—each split into three sections—will have heating, hot and cold water, sanitation, plumbing and fire protection.

Sir Robert McAlpine and Sons is the main contractor for the scheme.

Causes and costs of accidents

HAZARDS in Construction: an examination of causes, consequences and costs of accidents is the title of a conference sponsored by the Council of Engineering Institutions, following the success of "Safety on Construction Sites" conference held two years ago.

To be held at the Institution of Civil Engineers on November 23-25, it will be opened by Mr. Robert Carr, Secretary of State for Employment.

The construction industry is responsible for more accidents than any other, says Sir W. D. Short, deputy chairman of the conference committee, and former head of the civil engineering branch of the Factory Inspectorate.

"The 1970 figures revealed a slight reduction in fatal accidents and an overall reduction as well," he adds.

Mr. L. C. Kemp, national secretary, Transport and General Workers Union, says design is not the responsibility of trade unions, but if failures continue it will be up to unions to advise their members whether or not to work on certain structures.

All interested in safety should contact the Institution of Civil Engineers Conference Office, Great George Street, Westminster, London SW1.

£2m. bindery in Scotland for Collins

SINCE provisional plans for its £2m. bindery at Bishopbriggs, West Scotland, were announced by Collins, the publishers, last year, a detailed feasibility study has been completed and now Melville Dundas and Whitson has been awarded the building contract.

Work on the 283,000 square foot factory is due to start this

month with completion planned for the spring of 1973. The bindery should be in full production by September of that year.

This project has been designed by Wylie Sparks and Partners, architects of Glasgow, in accordance with a design brief and feasibility study prepared by PA Management Consultants.

Situated on a 22-acre site on Westerhill Road, the bindery will have a production area of 212,000 square feet, and adjoining office block with canteen, medical centre and supporting ancillary areas including car parks.

Collins recently acquired an additional 40 acres adjacent to this site for future expansion.

Safety training

IN response to growing demand for professional assistance with safety training, the Laing Safety Training Centre at Manor Way, Boreham Wood, Herts., now offers intensive courses in accident prevention.

Courses are held in timbering and excavation, scaffolding, abrasive wheel mounting, fire prevention, and for drivers of mobile and tower cranes. Facilities include practice areas for undertaking timbering and excavation, scaffolding and crane operation.

Fees range from £8.50 for the one-day abrasive wheel mounting course to £37.50 for the five-day session on timbering and excavation. Approval has been given, for grant purposes, by the CITB.

Syllabuses are available from the Superintending Safety Officer, John Laing and Son, Page Street, London, NW7 2ER.

In brief

FOUR further school building orders totalling around £800,000 have been received by Condor Group for its Kingsworthy "dry envelope" system. Largest of these concerns a 7,000 square metres building for the first phase of Buchan Technical College at Fraserburgh.

The other two ROSLA units are for Nottingham City Education Department and a Roman Catholic Middle School, St. Joseph's, at Nunceaton.

FOR the Melton and Belvoir Rural District Council, Drury and Co. is to build a total of 44 dwellings, comprising 3-bedroom bungalows and bungalows of traditional construction, on four different sites. Heating will be by

electric warm air. All the sites are extensions of existing local authority housing developments.

ELECTRICAL services for the extension to Falkirk Technical College are to be installed by James Scott (Electrical Engineers), of Perth. Awarded by the Stirlingshire County Council, the contract is worth £145,000.

Main contractor for the job is Wright Construction Company, and the consulting engineers are Hulley and Kirkwood.

MOWLEM Construction Company has won a £1.5m. contract from the Government of Kenya for the construction of a 15-mile stretch of road between Dagoretti and Ndenderu. The work is expected to take two years.

Enlarging an exchange

AT HANLEY, Staffordshire, Holland Hannen and Cubitts (Midlands) is to build a new telephone exchange under a £377,000 order.

Representing phase 1 of a scheme which will replace the existing Trinity exchange building, the job is scheduled for completion within two years. The 10-storey block is to be of insulated steel frame construction with precast cladding panels.

The existing exchange will be altered to link with the new building.

Pipeline project in Yugoslavia

FAST-RISING transport costs have compelled the Yugoslav authorities to plan the construction of a major oil pipeline serving the refineries at Pancevo and Bosanski Brod at an estimated cost of £38m.

A consortium has been set up between Hena, Energoinvest and HIP Pancevo to undertake the 550 kilometre project and a number of other organisations are in process of joining, including the Yugoslav Investment Bank.

needs of the refineries amount to about 3m. tons and the cost of carrying the crude oil to them by rail or river is already judged to be too high. Also influencing the decision to build is the expectation that the refineries and new petrochemical plants in their area will expand output to such an extent in the next 10 years that the total demand for crude will rise to 11m. tons. To carry this amount by rail or water would cost twice as much in terms of conventional transport systems as the pipeline.

Current annual transport Rough estimates show that

over 20 years the Neum-Pancevo pipeline should save about £150m, the present cost of carrying one ton of oil over the distance being put at \$3.58, dropping initially to \$2.4 on completion of the pipe and ultimately to \$2.

Civil engineering operations and other work outside the equipment of the pipeline are expected to account for £24m. So far some £12m. of initial capital has been found and credits amounting to twice that figure are anticipated.

The Yugoslav authorities are understood to consider the project as one of high priority and plan to conclude arrangements with domestic and foreign consortium members as soon as possible.

That the project is intended to be a big one with long-term improvements planned is shown by the fact that initial capacity is put at 6m. tons but that the throughput will be gradually increased to 30m. tons and design is to be carried out in function of this.

Energoinvest's London office is at Chancery House, 37 St. Chancery Lane, London, W.C.2.

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WORLD STEEL

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New rules for State steel

By KEN GOFTON

In this political world nothing is a certainty until it has happened. Even so, British entry into the Common Market looks more likely now than at any time since the Six was established. There are important implications for the State-owned British Steel Corporation—a statement that may seem self-evident in view of the localised, "It's a good thing/it's a bad thing" debate which has centred around the BSC this summer. Enough has been written by both sides to show in fact, that there is not an overwhelming case one way or the other as far as State steel is concerned. Even a curate's egg analysis, suggesting that it looks good in parts, does not quite meet the case: the truth is simply that joining the Common Market means accepting a new set of rules. The guiding principle is fair trade and competition. The rules do not work as perfectly as they might. But the points which worry some political commentators are the very ones which their antagonists welcome.

One of the most obvious consequences of entry is that the tariff walls will come down between the British steel industry and its European competitors. Theoretically this ought to mean a greater flow of metal for dismantling this protection in both directions. It will certainly mean a greater choice for U.K. consumers, who at times have been exasperated by the BSC's monopolistic position. Whether or not the BSC has come off on July 1, 1977, from equal scope for increasing its 1973, the Corporation will also

sales to the Continent depends upon a number of factors. These include both the question of how competitive BSC can be, and how free it will be to establish an effective distribution network in Europe. So far as the first is concerned, there is variation from product to product in some areas, such as plates and special steels, but there are others, notably tubes (which have been taxed behind a 17 per cent tariff), where the wind of competition may bring an icy touch.

Chain of stockists

On distribution, it would be logical for the Corporation to seek to set up or take over a chain of distributor stockists throughout Europe to handle its products and give an efficient ex-warehouse service. It can be argued that its competitors will probably want to do the same here. However, allowing the Corporation to expand "down stream" is a decision with political overtones, which may mean that the answer is not as obvious as it might appear.

U.K. tariffs on steel from the Six at present average 8 per cent, the example of tubes at South-East England, particularly for strip, the raw material of the car industry. The BSC is expected to have decided on its basing points by the end of next month, and providing there is no behind-the-scenes argument, these should be cleared by the Government by the end of the year. Consumers will get their chance

to operate the pricing system favoured by the European Coal and Steel Community, abandoning its own system of uniform prices throughout the U.K. The ECSC system is for individual steel companies to nominate "basing points," which may or may not be the mill door. Steel prices at those basing points, together with transport costs, have to be published, so that in theory the price that any consumer is paying for his steel is known.

Steel companies have the freedom to align downwards from their published prices in order to meet competition from third countries. This can give a useful degree of flexibility: it has also been named "the trapdoor to hell" because of the temptation to cut prices to unrealistic levels in a recession. The basing point scheme poses a number of problems for the BSC which have yet to be resolved. Not least of these is the question of which centres should be nominated as the Corporation's basing points. However the arithmetic is juggled; for instance, it is quite possible that the published prices of the Dutch and the French will set the levels in South-East England, particularly for strip, the raw material of the car industry.

The BSC is expected to have decided on its basing points by the end of next month, and providing there is no behind-the-scenes argument, these should be cleared by the Government by the end of the year. Consumers will get their chance

to evaluate them: it is likely that a series of consultative sessions will be arranged next year.

Agreement has still to be reached on the technical point of how U.K. transport costs should be posted, and, more awkwardly, what should be done about North Sea shipping charges.

Cynical view

These are matters for negotiation. But there is a cynical view in the industry that whatever the elimination of tariffs and introduction of basing point pricing might do for inter-trading, it will do little for steel industry profits but a great deal for the shipping lines.

A new pricing system also means a shake-up for the Corporation's sales organisation. Put bluntly, the rep's job will

broaden from one of, primarily, customer liaison, where he is bound by a detailed price schedule, to one where there is more competition to be faced on price, delivery and other factors. The pitfalls facing the BSC are either to restrict decisions on meeting competition to a senior level (and thus run the risk of continually being caught slow-footed), or to entrust the reps with more responsibility than they have at the moment. It seems likely that the Corporation will settle for the latter option: already it is mounting plans for a major training programme next year to accustom its staff to the new situation.

Outside critics have also suggested that the basing point pricing system will influence the British Steel Corporation to site new projects in the indus-

trial belt and specifically the south-east, instead of in the development regions. This was countered by Mr. David Waterstone, then BSC's director of international affairs, in an article in the Financial Times in July, when he said that there was no particular reason to expect that the question of siting new plant would not continue to be dominated by the straightforward commercial calculation of balancing the cost of bringing raw materials to it against the cost of transporting finished products away. "The results of this calculation by no means always lead to the apparently obvious conclusion that plant should be sited as near the market as possible."

The particular case in point, of course, is BSC's wish to build a £1,000m-plus steelworks on a green-field site. If that project

goes ahead, are the chances of it being located in Scotland damaged by the Common Market issue? The short answer must be that, despite Scotland's deep water facilities at Hunterston, the commercial arguments almost certainly favour other sites, irrespective of the Common Market. The Government's thoughts on stimulating the Scottish economy could have a bearing, but this leads naturally to one of the most controversial aspects of the whole question, namely the extent to which the Government will surrender control of the BSC.

Surfeit of control

Among the critical points here are the fact that the Commission will have some influence on BSC expansion plans, and the U.K. Government will have to concede some of its power, particularly on pricing questions. There will be at best a greatly reduced role, for instance, for the Iron and Steel Consumers' Council, but then it is unlikely that its passing will be deeply mourned. Broadly speaking, these are the issues which most worry the advocates of state ownership and control of a basic industry such as steel. Conversely, there are those, including many in the BSC itself, who lay the blame for many of the industry's troubles on a surfeit of Government control.

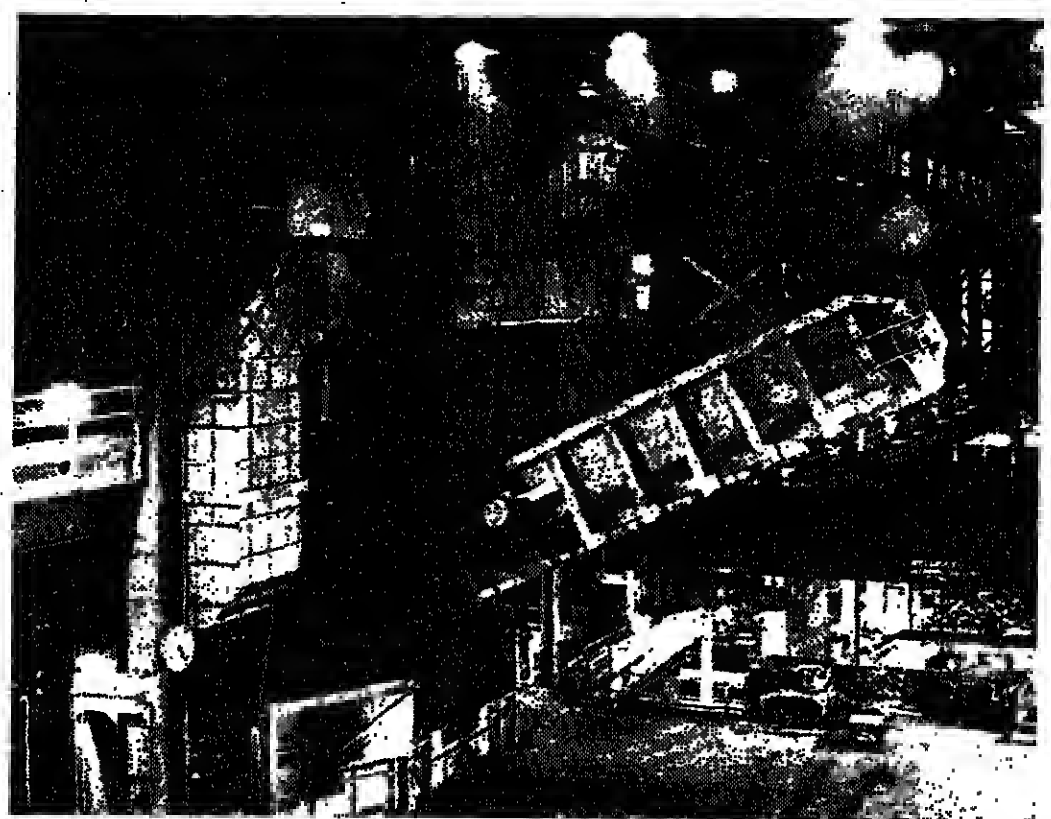
For instance, on one estimate, if the Corporation had the freedom to raise its prices to European levels while the world steel boom lasted, it would have enjoyed an extra £200m. revenue, and would have been in the black.

On May 4, the ECSC presented a document which listed many of the current practices considered incompatible with membership of the Community. They include the supervisory powers of the Secretary of State for Trade and Industry, enabling him to give directives to the BSC, and the need to refer projected price increases to the PDB. These points have been accepted.

Investment plans will have to be submitted to the ECSC authority, and these include not only physical expansion through the building of new works, but also growth through merger or acquisition. On one level, the Community has made it clear that it is not happy about the size of the BSC, which will account for 18 per cent. or so of production, and therefore, it is not likely to be wildly enthusiastic about major expansion plans. Against that, its powers are fairly weak. Most likely cause of a row would be if the BSC were to press ahead with major expansion plans while still making a substantial loss on its operations: Community officials would not be alone in questioning the wisdom of investment in those circumstances. The Corporation's terse answer to that is that it intends to be profitable.

There are other questions raised by Common Market entry. The BSC has acknowledged that it will have to abandon its long-standing price agreement with the scrap trade—a move that in theory could add £12m. to its costs as U.K. scrap prices rise to Continental levels. It is also common knowledge that the Corporation would like a bigger stake in steel stockholding both in this country and on the Continent, in line with its main competitors. Such a move will be opposed by the well-established stockholding industry here, to say nothing of the Government's attitude, which can only be guessed at, but there is a belief in some sections of the BSC that this would be one way to offer a flexible efficient service to customers and curb imports.

On the whole, however, Common Market entry for the BSC boils down to the question of getting used to a new set of rules. Some will be embarrassing, some—particularly those which guarantee greater commercial freedom—ought to work to its advantage. Prospects for growth hinge on the expansion of its customers (an intangible factor) balanced against the increased competition it will face.



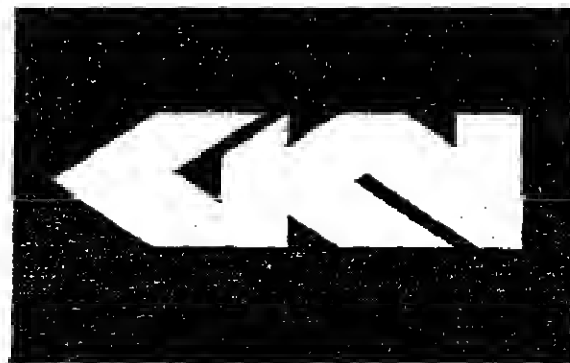
Charging scrap into a converter at BSC's basic oxygen steelmaking plant at Port Talbot.

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WORLD STEEL II

Moderate confidence in spite of the recession

By COLIN JONES

The world's steel masters have experienced recessions before. Because of these memories, the present recession is being allowed to have a somewhat different impact than previous ones. For once, steel producers have been letting output take rather more of the pressure, and prices rather less. Those sensitive bellweathers of the world steel market—Continental export quotations—have come back by only about a fifth to a quarter since their end-1969 peak, and are still at very much higher levels than before the last boom three years ago. Output, on the other hand, has been pared back by about 6 per cent in Japan and on the Continent, and by rather more in Britain. Only in the U.S. has steel output risen this year, and that can be put down to special circumstances—the rush by steel users to build up their steel stocks before the threatened national steel strike.

Steel is a relatively low-value material made by increasingly capital-intensive methods. Producers are therefore under heavy pressure to keep capacity utilisation as high as possible. When demand falls off at home, and the flow of orders is hit both by the lower rate of consumption and by users deciding to live partly off stocks, the natural tendency has been to push exports as hard as possible. As the world's biggest, and fastest-

growing, steel import markets are those of other major steel producing nations, the main outlet for exports at panic prices has thus been the home territory of other leading producers. On the Continent, because of the ECSC pricing rules, and in the U.S., because of the anti-trust situation and relatively low tariffs, the result has usually been rising imports and lower home-trade prices all round. In other words, most producers end up by gaining hardly anything at all.

Lower prices

That this temptation to set off a "vicious spiral" of lower prices and then falling output has been at least partly resisted this time is a tribute to what one might describe as the industry's growing maturity. Naturally, steelmakers have long seen the unwisdom of cut-price export competition, but they have lacked the ability to prevent it. The recent urge to acquire strength through concentration of ownership, mostly by merger, within each major national steel industry has undoubtedly been the key factor in the changed situation. True, the British Steel Corporation came about as the result of nationalisation, but the West German industry has moved further along the road to the formation of four major groups, the French and Belgian industries are now concentrated into

about two major groups each, the newly-created Nippon Steel represents about a third of the Japanese steel industry, and even in the U.S. National Steel has been allowed to take over Granite City to form the third biggest company after U.S. Steel and Bethlehem.

This regrouping within each major steel producing country has in turn made it somewhat easier to foster measures of voluntary restraint on a wider scale. The Japanese and ECSC producers agreed to set a limit to the growth in the volume of their shipments to the U.S. market. The Japanese have now agreed to impose some restraint upon their sales of stainless steel to certain European markets, and hopes are still expressed that this move may eventually be widened to other products. Meanwhile, back in Japan itself, Nippon Steel is trying to lead the industry into accepting a much slower rate of capacity expansion over the next few years, aiming at 120m. tons or even 110m. tons by 1975-76 instead of the earlier figure of 160m. tons—as against this year's output forecast of a little under 90m. tons.

The latest factor in all this of course, has been President Nixon's economic package in August and the wave of currency changes it has triggered off. The Continentals have called off their voluntary limits on exports to the U.S.—probably as a bargaining counter

rather than purely as an act of retaliation. But the Japanese are reputed to have agreed to renew theirs for another three years from December, even though they have to contend with both the U.S. import surcharge and the yen revaluation.

The big question, however, is the impact of the American measures upon world trade—both in general and in steel. On the one hand, it can be argued that the measures should help to boost the American economy, especially the automobile industry. As a result, some U.S. steel forecasters are predicting substantially better output and sales figures in 1972 with the improvement starting to show through in the fourth quarter of this year.

U.S. moves

On the other hand, some observers feel that the U.S. moves could encourage a worldwide swing towards protectionism in the absence of any early agreement between the major powers. At the very least, the reduced opportunities for exporting to the U.S. as the result of the surcharge, the special tax credit for "buying American," and the depreciation of the dollar will mean a

slower overall growth rate in world trade.

Certainly, Japanese and West German steel producers will find direct steel exports tougher going because of the Yen and DM revaluations, and home demand in each of those two countries may also not pick up so fast because of the parallel effect upon exports of steel-based products. But other Continental producers seem to the whole to be fairly optimistic about a recovery in their home trade next year and so is British Steel. One may thus have a situation in which domestic demand will probably recover in North America and in most parts of Western Europe at a time of continuing uncertainty over export demand. The key factor, clearly, will be Japan. If the Japanese steelmakers prove willing to refrain from switching all their frustrated U.S. exports to Europe, then Europe's producers can look forward with reasonable confidence not only to rising output but also to reviving profitability. But if the Japanese find the pressure to employ under-used capacity too great to resist the herd, then steelmakers everywhere could find the going somewhat tricky.

The scrap merchants

By DAVID WALKER

Britain's prospective entry to the European Economic Community arouses mixed feelings in the metals industry. Even within steel production opinions vary widely, despite British Steel Corporation chiefs' formal backing of U.K. membership.

Probably none of the sectors involved in metals production has so large a body of pro-marketisers as the ferrous scrap trade. There, many see the EEC as potentially the industry's salvation after a very difficult period indeed.

The reason lies not just in changes in competition or opportunity for sales which the EEC will produce of itself, but in the inevitable ending of the Scrap Agreement which, for 35 years, has bound scrap merchants to the domestic steel industry. Last year, merchants have claimed, the agreement in effect gave the home steel industry a subsidy of around £20m., of which some £14m. it is maintained, went to the British Steel Corporation.

Under the agreement, the steelmakers undertake to buy solely from U.K. merchants, going abroad only if insufficient quantities of a particular grade or grades are unavailable here. In exchange, the scrap merchants accept fixed prices which change but rarely and have gone up by less than 7 per cent in the past 10 years.

The agreement does not, however, oblige the steelmakers to take all the scrap produced by the industry. Thus, though prices are guaranteed at times of low demand—as the industry is experiencing now—markets are not.

The last price rise, a 4 per cent. average increase adding around £7m. a year to the raw materials costs faced by steelworks, came some 14 months ago.

Production slump

Within the industry, there had been hopes of a further price change being negotiated this year, but the slump in steel production appears to have ruled out success.

Even with a world-wide fall in steel production, scrap prices in Britain have remained well below the levels prevailing abroad, with the gap averaging out at around £2 to £3 a ton. In the boom period, it was considerably more. Last year, for example, the industry was allowed to export 400,000 tons of low-grade scrap unwanted by the British steelworks. Its value here would have been about £10 a ton; abroad the average f.o.b. price achieved was just under £17.

Alongside that have come mounting demands for higher prices from the industries supplying the scrap merchants, both because of increasing cost-consciousness and because the steady advance in steel prices has often, mistakenly, been assumed to have been reflected in the prices paid to merchants. The merchants' other over-

heads have also, inevitably, been rising.

Many scrap merchants nevertheless do favour the agreement, which they see as at least providing firm prices. But for many others it has been the cause of considerable resentment. Not only the pricing has come under fire; the grading specifications laid down have also aroused anger.

Export control

The problem from the scrap industry's point of view has been worsened by the tight control on exports in times of peak demand exercised by successive Governments. Understandably, concerned about the possibility of losing a large amount of valuable raw material for a key industry.

The overall result of those factors was typified for the merchants by the sight earlier this year of expensive American scrap being brought into Britain by the British Steel Corporation while far cheaper material of similar quality produced in the U.K. was unable to find a market.

BSC's imports had been arranged on necessarily long-term contracts during the steel boom, when sufficient suitable scrap was not available here. But that fact did not allay the ferrous metal reclamation industry's resentment at what it

Continued on next page.

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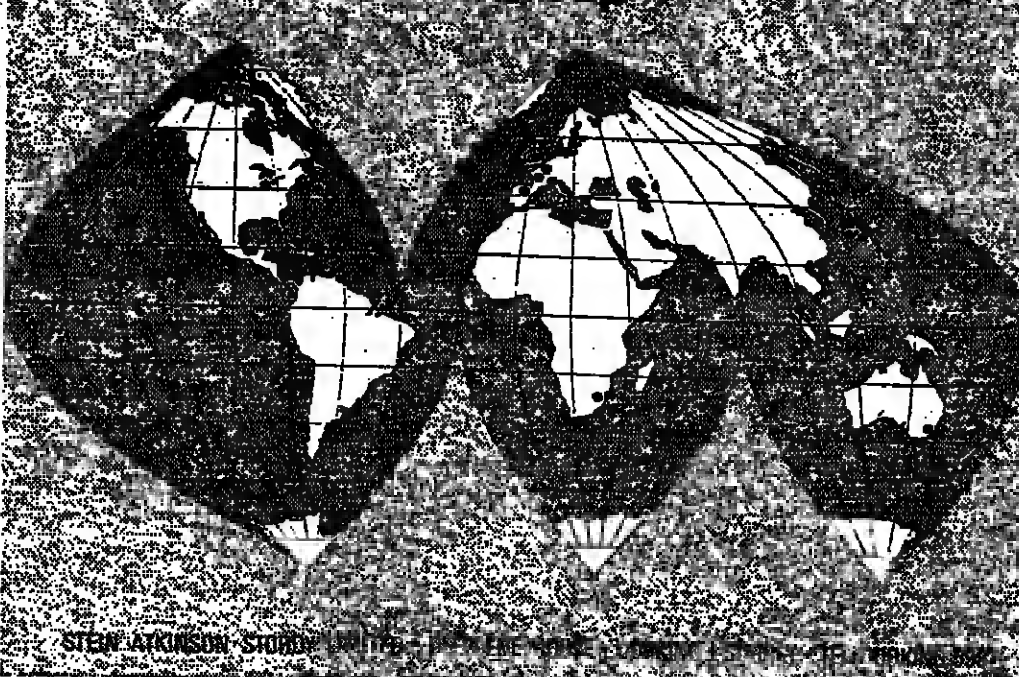
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WORLD STEEL III

Problems for private sector

By A. H. MORTIMER, Director,
British Independent Steel Producers Association

The great debate upon British entry to Europe is now drawing to its climax, and once again the steel industry is seen to be caught up in broad political issues. Analysis of the entry terms negotiated by the Government has dwelt, the cynics say, for partisan reasons, upon issues such as the size of the British Steel Corporation in relation to the EEC market, the surrender of control over the investment and pricing decisions of the Corporation by the Government to the Commission, and the fundamental question of how far the Community will tolerate the subsidies which are so often an inherent component of nationalised industry. All these issues have been debated primarily to the Corporation, and whatever the merits of the arguments, the sheer size of the BSC and its public ownership render them of great importance both to the U.K. and to the EEC.

Necessarily the same attention has not been given to the impact of entry upon the private sector of the steel industry, although it will be subject to the same overall supervision by the Commission, as the Corporation. Clearly the issues of size and of potential public subsidy do not arise for the independents, but they will be faced with the need to adapt to the provisions of the Treaty of Paris and to the changes in market conditions resulting from U.K. entry.

Substantial force

Although individually private sector companies have no need to be apprehensive about the Commission's view of their size relative to the BSC or the steel companies of the Six, collectively they are a substantial force in British industry. Together they account for one-quarter of the total deliveries of British steel by tonnage and one-third by value of turnover. Their share in 1970 of the finished products was (in per cent.): hot rolled bars and light

sections 53, wire rods 38, cold strip 60, bright bars 90, tubes 28 and forgings 77.

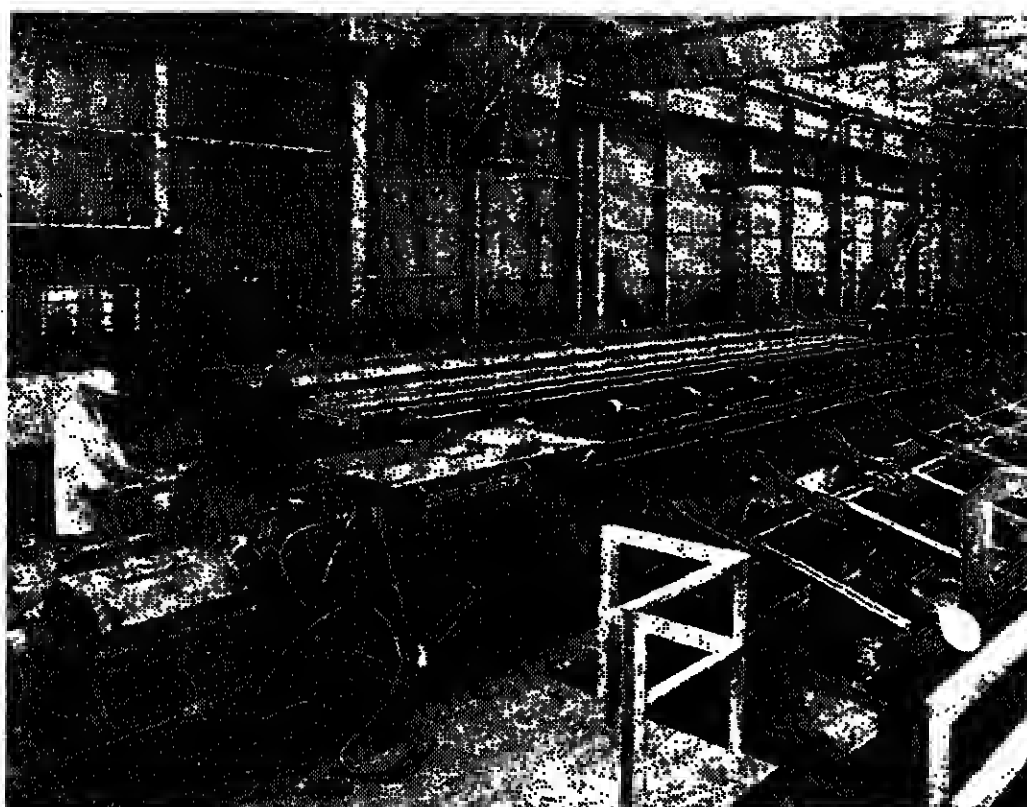
In alloy and special steels even higher market shares are held by the private sector, which helps to account for its value/tonnage ratio being higher than that of BSC. Whereas the share of non-alloy crude steel production in 1970 was 7 per cent., the equivalent figure for alloy steels was 38 per cent., reflecting also in finished products, that is, hot-rolled bars and sections 56 per cent., cold strip 61 per cent., plate 30 per cent., sheet 43 per cent., bright finished bars 76 per cent., tubes 69 per cent., high speed and tool steels 93 per cent. and forgings 79 per cent. The private sector companies are thus in some respects complementary to the BSC and would be exceptional in EEC, where the independent re-rolling company at present plays a far less important part. There may well be advantages for their type of specialised operation, which is frequently geared to a particular market in the engineering sector, since entry into Europe will generally mean a better market for the U.K. user of the finished steel product in the engineering industry, and at the same time the prospect of a more flexible approach to securing supplies of semi-finished steel, which is the re-rollers' and finishers' raw material. No precise parallel exists as a pointer to the private sector's potential performance in Europe, since the same multiplicity of medium-sized companies (there are over 100 in BISPA) does not exist, except superficially in Italy, where a large number of small firms are primarily concerned in the production of low-quality material in relatively small quantities.

The private sector considers that its very independence from Government control and the strictures of monolithic organisation will be advantageous in meeting the challenge of Community trade which will also be subject to the Paris pricing system, and one current problem

Pricing regime

A complete change of practice in the pricing of "Paris" products is inevitable, since the agreement reached in the Brussels negotiations was that the Treaty's pricing regime must apply upon U.K. entry to the Communities, which under the present timetable means January 1, 1973. At present private sector companies are under no statutory obligation to publish their prices, although some do, and the general practice in the U.K. trade is for all in delivered prices to be quoted. Upon entry to the EEC, there will be an obligation on private sector companies to publish prices for "Paris" products for all sales within the Community, and to operate the basing point system, with freight again at published rates being separately added, dependent on the location of each consumer.

In considering the effects upon the private sector of this system, perhaps the main point to note is that most of its operations are geographically close-knit, so that the adoption of the basing point system is unlikely in itself to lead to major distortions in its current patterns of trade. The three main centres of production are Sheffield, the Midlands and South Wales, and the centre of gravity of the private sector market must itself be in the Midlands. Intra-Community trade will also be subject to the Paris pricing system, and one current problem



Production of GK TorBar at the GKN (South Wales) Ltd. works.

lem is to satisfy the requirement to publish maritime freights, which are necessarily multifarious and subject to substantial fluctuations.

Between now and 1973, the implications of the "Paris" changes for producers of "Rome" products, not subject to the publication or basing point requirements, will also have to be worked out. In many cases they are the same companies, or members of the same trading groups as "Paris" producers, and all use "Paris" products for their raw materials. The general requirements of non-discrimination and fair competition of the Roma Treaty will also have to be observed. The combined requirements of the two treaties point to a complete revision of the pricing systems, and for the private sector BISPA is well aware that time is short, particularly for the process of explanation of the changes to customers. It would certainly seem desirable for acclimatisation to start before entry so that the consumer is given the maximum time to make his own adjustments.

Pricing is perhaps the most important but by no means the only problem for the steel industry upon entry. The scrap agreement seems likely to disappear in its present form, and the control of export to EEC countries, insofar as it survives at all, will disappear within two years. Certain ferroalloys were included on the list of "sensitive" materials,

however, that the main stimulus from entry will arise from a growth in production, *inter alia*, in vehicles, their components and advanced technology industries of 7-10 per cent. by 1978-80, which would reflect in steel a growth of 5 per cent. This prediction is put forward as a minimum effect and confirms the industry's own conclusions that the increased activity and opportunities for growth in the private sector's main customer industries—vehicle and engineering—must enlarge its home market. The private sector's strength is its relative flexibility and ability to specialise, two essential assets in meeting the new conditions of a market, not only larger, but more competitive.

There are still structure problems, although the Government statements earlier in the year made the way clear for their resolution. The prospect of entry into Europe may well be the final impetus needed to ensure that the private sector is given the degree of self-sufficiency in the supply of semi-finished steel which it has long been seeking and which has not yet emerged from industry's discussions.

Cyclical nature

Any examination of the effects of entry upon the industry must take account of the cyclical nature of the trade in steel and major external factors, but leaving these aside, the general view is that, although the level of intra-Community trading in steel can be expected to rise, a higher level of imports may offset increases in direct exports. The recently published study

Merchants

—(Cont'd)

Continued from previous page
saw as, at best, a lack of forward planning by its largest customer.

Some alleviation has come from the freeing of exports of all bar a handful of highly specialised grades of scrap earlier this year. The Government is due to review the situation this month, but the state of the steel market makes it highly unlikely that restrictions will be reimposed.

At the same time, the depression abroad means, according to some, that the Government move came too late.

Scrap industry leaders have in consequence been pressing for sweeping changes in the agreement to allow material to be supplied to the BSC and the independent steelmakers on a regular six-monthly contract basis. The merchants' customers would undertake to buy set amounts at fixed prices, with any surplus able to be sold abroad free of restrictions.

In effect the agreement as it has operated since before the war is dead. With Common Market membership for Britain, the industry maintains, it can be buried too. For the rules of the Community rule out any such hidden subsidy to the steel industry. It is noteworthy that the U.K. scrap agreement is virtually unique. Elsewhere similar arrangements at least write in guaranteed markets for the scrap dealers.

It seems probable now that the agreement will be formally ended over a transition period of around three years. Certainly, pressure for that is likely to come from the steel industry in Britain. From the scrap merchants is likely to come pressure for an immediate end to the arrangement. That, it seems clear, would be followed by a swift rise in prices and a restoration of reasonable profit levels in an industry which has seen a rapid erosion of margins.

Free play

The industry's welcome for EEC membership is not linked solely with the prospect of higher prices and greater opportunity for exports. There is hope, too, that the free play of market forces will lead to considerable further rationalisation.

Great changes have been taking place over the past few years, both in terms of the capital intensity of the trade and the size of the units operating within it. But there is little

doubt that the comparatively cosy atmosphere which has prevailed till recently has tended to stultify large sectors.

The stimulus of competition and the prospect of comparatively frequent price changes and market movements—the general need to anticipate trends—should prove valuable in changing that.

That the U.K. merchants will face more competition is little doubt. The bulk of scrap makes it even more than usual good sense for sales to be made on a strict geographic basis. And for merchants in Hamburg, for example, that could mean a better market in Scotland than in the Ruhr.

Economic sense

Thus Belgium last year imported roughly the same amount of scrap as it exported—and made sound economic sense in doing so. In Britain, no-one doubts that the industry will continue mainly to supply to domestic steelmakers. At the same time, most steelworks are in the Midlands or North. For scrap merchants in southern England, France is potentially a far more worthwhile market.

The hope of many is for a more rational flow of scrap across Europe as a whole. That should be to everybody's advantage, both in terms of countries and industries.

At the same time, EEC entry could bring acute disadvantages to the British industry. The Community's rigid control of scrap exports outside its own boundaries, in particular, could prove a major problem. Unless the U.K. industry succeeds in its attempts to achieve a more outward-looking policy, its traditional overseas markets in the Far East and Spain may have to go.

There is concern, too, about Value Added Tax and its effects on an industry in which an extremely large number of very small transactions take place and in which a sizeable amount of cross-selling by one merchant to another is done.

In France scrap merchants are exempt from VAT; in Belgium and the Netherlands they are given zero-rating. The administrative implications of the full tax for the scrap industry have already led to moves to persuade the Government of the necessity for Britain's scrap merchants to receive similar treatment.

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WORLD STEEL IV

Stockholders look for upturn

By ANTHONY MORETON

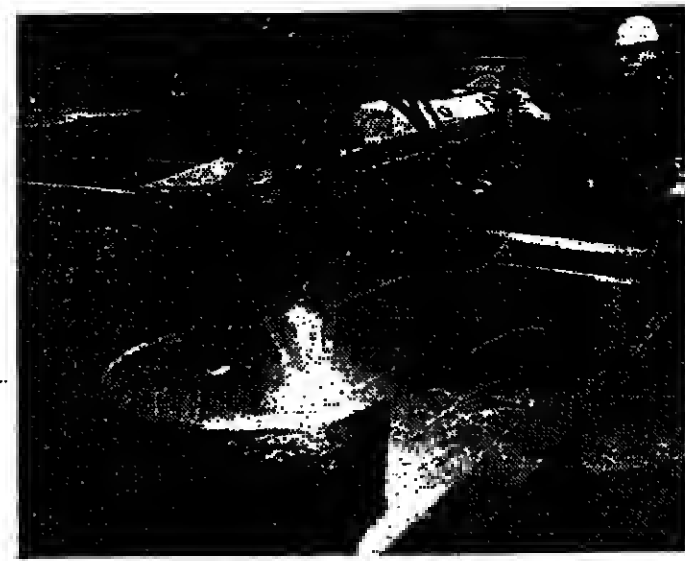
Like most of the rest of British industry the stockholders have not had a happy time this year. The fall in demand for steel from a variety of producing industries has inevitably had an effect upon them as well. But, equally, like a number of other industries such as motors, machine tools and bearings, people in the industry are beginning to detect either the start of an upturn or signs that demand has bottomed-out, and should soon begin to pick up.

The stockholders' fortunes can be judged to some extent by what has happened in the steel producing industry. There, consumption fell sharply during the second quarter of this year when it was some 6 per cent. below the mean for 1969, 1970 and the first three months of this year. According to the Department of Trade and Industry consumption of finished steel by private consumers was 7 per cent. lower in April, May and June compared with the first three months of this year. The fall recorded by public organisations is estimated to have been almost 6 per cent.

Motor output

However, there is some evidence now that consumers have stopped de-stocking and the stockholders are looking for an upturn in business in the last quarter of the year or by the turn of the year at the latest. The recovery of sales in the motor industry, which is now beginning to turn in some very good sales figures, is one important indicator. The stockholders themselves, with some minor exceptions, do not supply the Fords and British Leylands directly, but they are important suppliers to the component manufacturers, and so any increase in general motor output is bound to be reflected in their position. There are also hopes that in about nine months to a year's time there will be an improvement in the heavy construction industry.

Much of the basis for this optimism is being put on the Chancellor of the Exchequer's mini-Budget. The Government is, understandably, worried about the speed with which these measures are being translated into action, especially as the unemployment figures remain disappointingly high



Dunlop and Ranken employee flame-cuts a steel profile plate.

with the underlying trend still moving upwards. But there is no doubt that these measures will soon start to hit in consumer demand and be reflected in higher output.

From an industry point of view, the stockholders have managed to weather the recession remarkably well. Profits and profit margins may have been affected, but the basic stability of the industry has been maintained. Inside the industry much of the credit for this is attributed to the way in which it has become established around strong companies. Miles Druce, John Cashmore, Brown and Tawse, Lye Trading, John Williams and Brinton, Adams and Richards and others in the GKN group, among the leaders, have all built up their organisations over the past decade so that they play an important part in this side of the industry.

In fact, the stockholders have become an integral and important part of the steel industry in recent years. Over a decade the percentage of home market steel deliveries passing through stockists' hands has about doubled. Total finished steel deliveries via stockists account for about 30 per cent. of the trade in normal times and in some sectors it is as high as 40 per cent. But some extent of the steel recession on stockists can be seen from the fact that in the first quarter of this year the figure had fallen to a monthly average of 24 per cent.

But when the steel cycle turned down the critical voices were heard with increasing force. Such criticism does not do justice to the stockists. They are, after all, in business, and if the home industry cannot supply them (and, through them, their customers) then they inevitably have to look elsewhere for their sources of supply.

The other side of the medal is that the stockholders are looking abroad for expansion. So far, the only tangible evidence of this is John Williams' move into Europe, but it is not far from the minds of many of the others. Again, the ISC is, however indirectly, playing a part. The Corporation has indicated that, given British entry to the Common Market, Europe will become an increasingly important area of operation. This has helped to stimulate interest among the stockholders there.

Belgian market

John Williams has gone into partnership in Belgium on a 50-50 basis with Nobels Peelmans to set up Ghent Steel Service Centre because it believes there is considerable room for expansion there even though it is a tough market. Compared with the British stockist, which turns over its stock probably five or six times a year in normal times, Williams found that on the continent the figure was frequently as low as 1.5 times. It even discovered figures as low as 0.85.

John Williams believes that any continental venture had to be a joint operation with an existing stockholder. To go in "green" would be extremely difficult, it believes, hence its tie-up with Nobels Peelmans. But it also believes that British know-how can help to iron out the fluctuations in prices that occur there and bring a greater degree of stability.

The BSC's European thinking is important in this respect. On the continent stockholders are much more producer orientated in that the large producers have their own concerns. If the U.K. does succeed in entering it could lead to the Corporation setting up on some scale in a stockholding, though this is unlikely in the immediate future because of the political problems involved.

Little to encourage private sector building

By PHILIP CARDEN, Editor, Steel Times

Investment in expansion and modernisation schemes in the private sector of the U.K. steel industry since nationalisation, including work currently in hand, amount to around £90m., of which about two-thirds concern member companies of the British Independent Steel Producers Association (BISPA).

With the climate, both political and economic, against forward planning, there has been little this year to encourage companies to add to existing commitments.

The Secretary of State for Trade and Industry, in the House of Commons on June 28, did something to clarify the political scene, but the long-term plan for the industry, which is eagerly awaited, could bring new complications for the private sector.

Entry into the Common Market, although strongly favoured by the independent steelmakers, will not prove healthy for all companies. The cost in terms of closures could be high.

A number of significant projects have been completed recently in the private sector, while others are scheduled to come to fruition as far ahead as 1975. It is not possible here to give a complete record of private sector activity, but attention can be drawn to some of the more interesting projects.

There is no more exciting development currently than the mini-steel plant under construction by Sheerness Iron and Steel Co. on the Isle of Sheppey. Sheerness will surely be warmly welcomed into BISPA's ranks just as soon as steel is made.


And that, says Mr. C. Clancy Schuppert, the company's Executive Director, will be in February or March next. "This is considerably earlier than we expected at one time. We are now coming to the critical stages, but so far we have no major constructional or engineering difficulties."

Virtually all continuous-casting units went into the public

Pride of place for size in the private sector's programme is taken by Round Oak Steel Works' £2m. "Nimrod" scheme. Excavations for cooling banks to the new 850mm. three-stand mill for heavy rounds, thick and thin flats started in August. The scheme includes replacement of five basic open-hearth furnaces by two high-powered, 115-ton top weight electric arc furnaces, due for commissioning

in winter 1973-74 and in 1975. Firth Cleveland Steel Strip believes that its chances of retaining the Firth Cleveland Group's Export Cup have been enhanced by the bringing into full operation of a new cold-rolling mill of unique arrangement at Tipton. The mill, rolling high-carbon steel strip to better than British Standard tolerances, is rolling strip to

Continued on next page.



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WORLD STEEL V

Japanese competition proving a major headache for Europe

By A. H. HERMANN

Investment outlay in the iron and steel industry cannot react quickly to changes in demand. Investment in the Common Market steel industry is estimated to reach this year a record total of over £1,000m. (50 per cent. more than in 1970) in spite of the fact that the present troubles cannot be explained merely by cyclical fluctuation of demand. New investment decisions, however, fell from about £1,600m. in 1970 to about £170m. in the first six months of 1971.

The European industry is facing severe competition from Japan. Because of the industry's strategic importance, European Governments in the past realised the tendency to cross-border links, and kept it in a state of fragmentation, convenient politically but not viable

economically. No one complained as long as the boom lasted and while West German builders were ready to pay black-market prices for structural steel. Now the tide has turned. During the first half of 1971 raw steel output was down by 6.2 per cent. in the Common Market and by 10.3 per cent. in the U.K., and steelmen now say an upturn is unlikely before next autumn.

Full impact

Japanese output is also down by about 6 per cent. and it is bound to feel the full impact of President Nixon's 10 per cent. import surcharge. Already Japanese steel sales are making progress throughout Europe and it is an even more dangerous competitor in third

markets. "The price of stainless steel will follow whatever the Japanese producers choose to ask for their steel," said the leader of one of Sweden's big steel companies recently.

The present slackness in demand and the possibility that Japan will divert sales from the U.S. to Europe only reveal an inherent structural weakness. The vulnerability of the continental industry results from the much higher concentration of the industry in Japan. The U.S. and Britain, all of which either have or are now planning plants with an annual capacity of 10m. tons—about twice that of the largest in Europe. The pressure of the Japanese output on the world market is very great because Japan must export some 25 per cent. of its finished steel to

cover imports of iron ore and coking coal.

The world-wide shortage of coking coal puts the European steelmakers to a further disadvantage, because the Japanese industry has secured supplies of ore and coal by signing 20-to-30 year contracts. The result is that the Japanese industry can deliver slabs to European ports well below the cost at which these can be produced in Europe. Such a calculation is behind the Japanese intention to expand the Hellenic Steel Company's capacity in Thessaloniki to 1.5m. tons hot rolling and 1m. tons cold rolling and to feed it with cheap slabs from Japan. Common Market countries are opposing this scheme though sponsors of the joint venture claim that they have an eye on the Greek and East European markets only.

Soviet slabs

However, imports of slabs for rolling in Europe is another idea with which the European industry will have to learn to live. In the east, Soviet slabs are now being rolled in Bulgarian mills. In the west German steelmakers have shown a lively interest in replacing some of their ore imports by constructing blast furnaces in Australia and importing slabs, an arrangement for which the American prices covering fixed costs only, industry has provided a model.

Will the movement of integrated steelworks to coastal

regions, which marked the post-war period, now be followed by a splitting movement in which blast furnaces will be built nearer to sources of raw materials and rolling mills nearer to the consumer?

No such problems bedevil Europe's most advanced, integrated steelworks in Verina near Gijón on the north coast of Spain, which started operation last month. The Spanish Government, through the Instituto Nacional de Industria (INI) holds 68 per cent. of the equity; the rest is in the hands of Spanish banks and of Krupp. West German credits amount to about £50m., which is about 10 per cent. more than was necessary to cover plant and services delivered by Krupp. By 1975 output should reach 2m. tons a year. INI controls 80 per cent. of Spanish coal mining and will open a palletisation plant for Spanish ore.

The long-term adjustment of the Continental steel industry is bound to involve greater control over raw materials and greater concentration—and both will cost money. The immediate prospect, however, is not the present gloomy outlook in favour of the promotion of German industry, which is used in holding relatively high prices at home, is now accepting orders for plate and sheet at impressive margins, quite an improvement on the Japanese competition or by U.S. protectionism.

reinforcement in West Germany is supplied either from Japan or by Korff, whom the German industry counts as an outsider. The situation is worse where sectional steel is concerned.

The future of the European continental steel industry now depends on several factors. Will Europe's political unification progress fast enough to allow a cross-border concentration? Will demand for steel rise quickly enough to provide the necessary profit pattern? Will the Japanese provide a breather by agreeing to limit supplies to Europe? How long is the American surcharge to last?

Not defenceless

The European steel industry is not quite defenceless. The three-year voluntary agreement limiting steel shipments to the U.S. runs out at the end of this year and M. Jacques Ferry, President of the French Steel Producers Federation, said recently that it will not be extended if the surcharge is maintained. The present gloomy outlook should not be allowed to obscure the fact that the Common Market has not only the greatest concentration of steel production in the world but that it is also the biggest steel trading unit in the world and could therefore muster quite an impressive defence if pressed too hard either by Japanese competition or by U.S. protectionism.

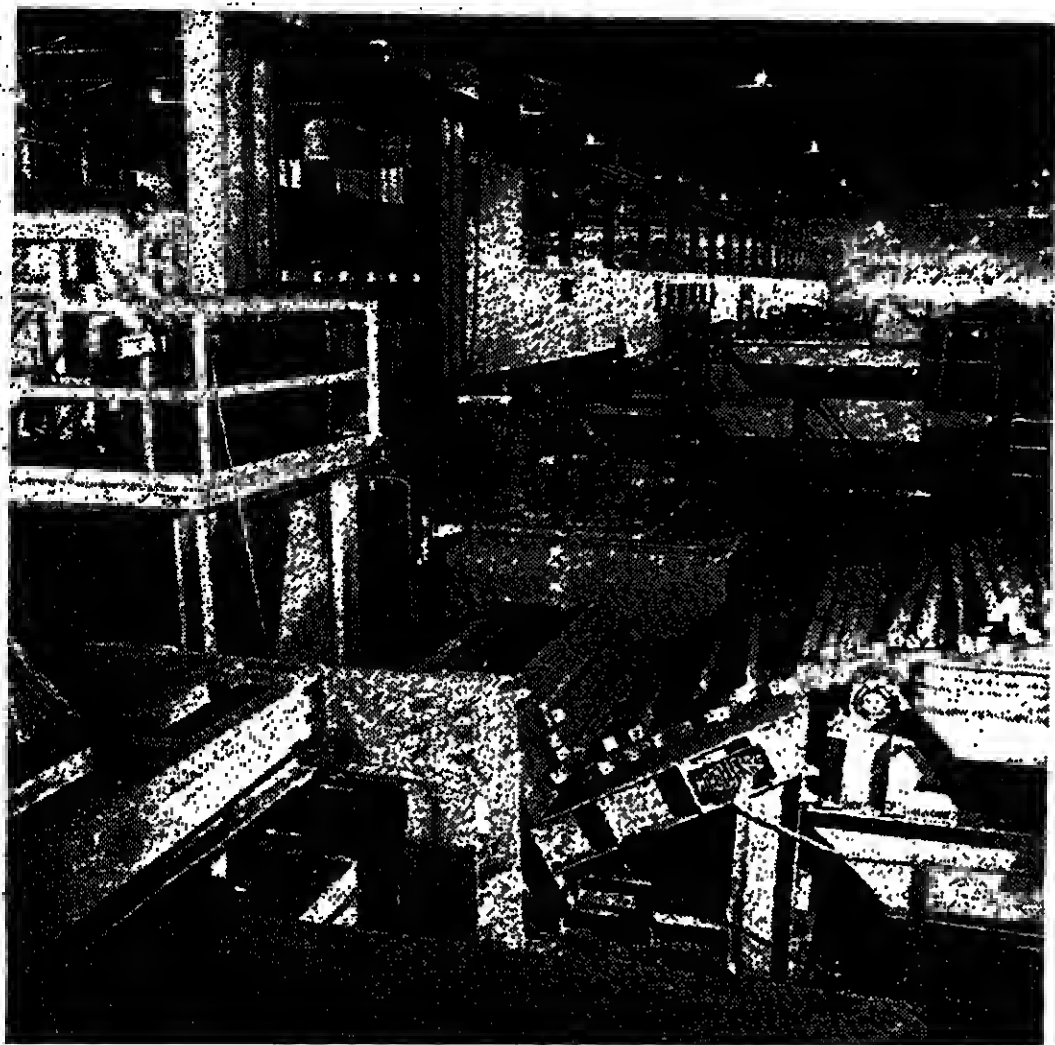


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The input end of the two natural gas-fired furnaces in the new twin mill at London Works Steel Co. Ltd.

Private sector—(Cont'd)

Continued from previous page
maximum of 13 inches wide and up to 0.104 inch thick.

Last year, Brown Bayley Steels drew up a comprehensive five-year plan of capital expenditure, with the proviso that it should be reviewed annually in the light of development needs, market opportunities and cash resources, a proviso not unusual in the private sector.

The plan detailed the progressive expansion of modern electric steelmaking facilities and primary rolling mill capacity. Its principal feature was an ability to achieve this by incremental stages at low capital cost. A start was made by approving an oxy-argon process

for installation this year in the electric melting shop.

Activity in the Duport Group has included rolling mill improvements at the Llanelli Steel Co. and commissioning of a semi-continuous twin bar and section rolling mill and re-heating furnaces at London Works Steel Company, Warley. The twin bar mill, with a production potential of about 85,000 tons, completes a rationalisation which has replaced nine outdated re-rolling mills with three modern high-capacity mills.

With the completion of the £1.6m. scheme to consolidate and expand the stainless tube-making operations on one site at Walsall, T.I. Stainless Tubes,

a member of T.I. Steel Tube Division, believes it has "a production capability second to none in Europe."

Tubes, another T.I. Steel Tube Division company, is near to completing a £450,000 modernisation scheme at Aston, Birmingham, involving major items of process plant and machinery used for the production of cold-drawn steel tube.

In a major expansion programme costing £12.5m., Templeborough Rolling Mills, Rotherham, owned jointly by British Ropes and the BSC, will increase production of steel wire rod by 50 per cent. to 300,000 tons a year. The programme, due for completion by August, 1973, will assure Templeborough's place among the world's most advanced wire rod mills.

Major supplier

GKN (South Wales), a GKN Rolled and Bright Steel subsidiary, is a major supplier of reinforcing steel to the constructional and civil engineering industries. Introduction of GK TorBar, the new cold-worked, high-yield reinforcing bar, is expected to bring substantial reductions in reinforcing steel costs. A new factory, representing an investment of about £1m., has been built at GKN's Tremorfa Works, Cardiff.

One of the steelmaker's problems is the allocation of raw materials—scrap and alloys—to cast of steel. He must daily select the best scrap, from physical, chemical and price characteristics, to manufacture the particular steels required on that day. With some 50 grades of scrap commonly available and about 20 casts per day to manufacture, and a series of constraints on scrap type usage for each particular grade of steel, the possible combinations to be considered are almost infinite.

Dunford Hatfields tackled the problem. The result has been the introduction of the Least Cost Mix, a linear programming system, developed jointly by the company and Honeywell Information Services. After several months' operation, it has shown that savings can be achieved by the use of scientific, computerised techniques.

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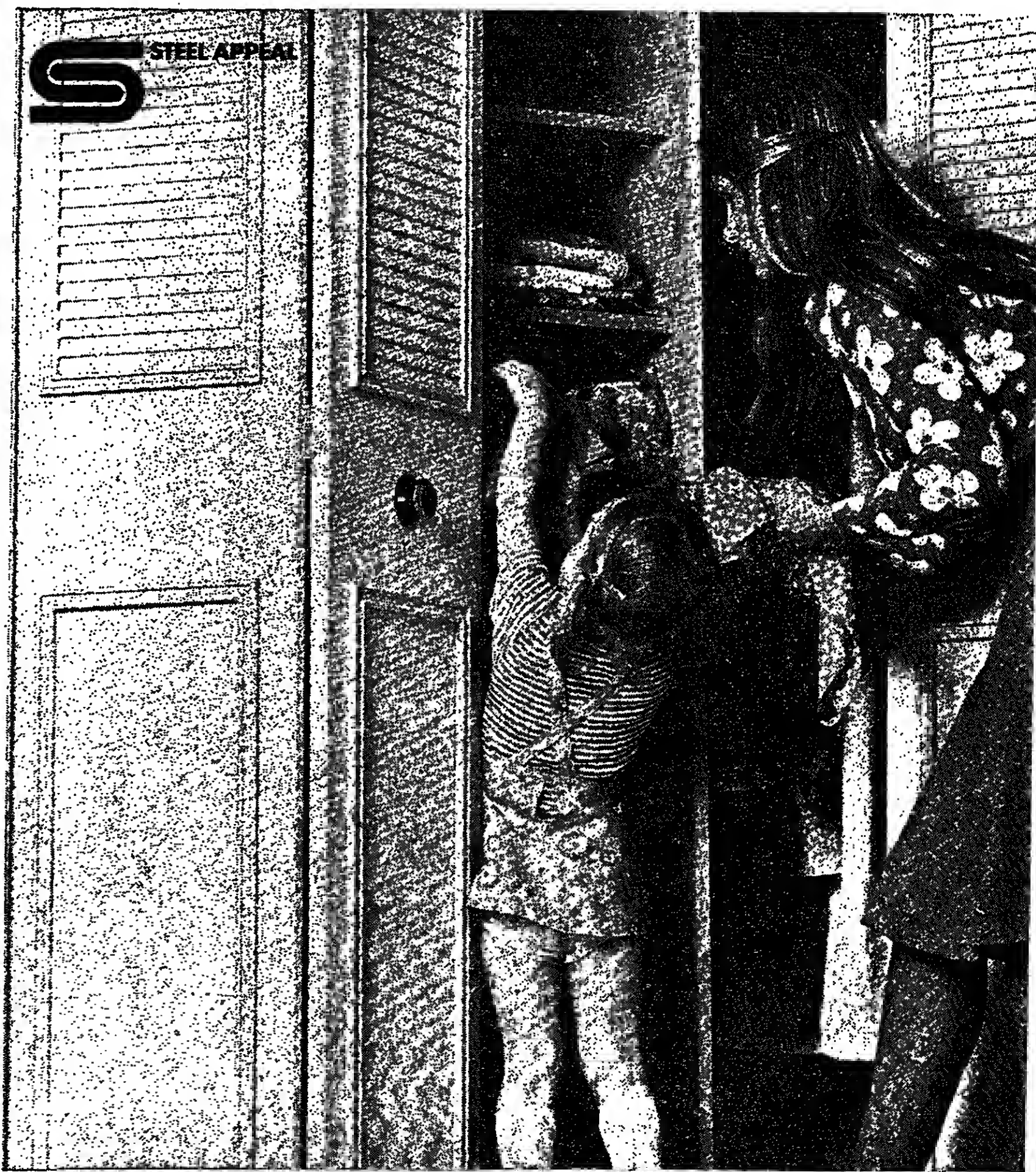
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WORLD STEEL VI Soviet industry in difficulties

By MICHAEL SIMMONS, East European Correspondent

The steel industry in the Soviet Union and the countries of Eastern Europe epitomises for many of them the achievements and at the same time the problems of their respective national economies. In almost every case, the planners would doubtless agree that it also represents the most explicitly political facet of economic life. If the iron and steel industry is doing well, they will tell you, then this directly benefits the national economy. Too often, however, they will be forced to concede, the iron and steel industry is not doing too well.

The Soviet Union, producing about three times as much steel as the rest of the Comecon countries together and now second only to the U.S. in the world output table, bears a good many of these burdens on its own. These have become particularly apparent with the shift of emphasis from quantitative to qualitative requirements, and the demands that have come with it for a more sensible use of steel. In some steel-using sectors, the Russians have been using twice as much steel as the Americans, but producing only half the U.S. amount of machinery.

Early last year, Pravda, the Party newspaper, a month or so after Mr. Brezhnev had berated the country's ministers and managers for widespread shortcomings in the economy as a whole, stated that the iron and steel industry was "in great difficulties". Deliveries were below target, and iron ore was piling up unshipped at the mines from which it had been excavated. This sort of complaint becomes more serious when it is compounded with another which appeared earlier this year in the Government newspaper, Izvestia, chiding the responsible Ministry (for Ferrous Metallurgy) for not going to Uralsmash, one of the USSR's biggest engineering workshops, for the huge blast furnaces that it could not only design but also build.

Had the Ministry taken this advice some years sooner, there

would not perhaps have been the downward revision of the original iron and steel target output figures, mooted nearly five years ago, for 1970. These figures evolved in the expectation, voiced by Mr. Nikolai Baibakov, Chairman of the State Plan, that output would last year be as high as 128m. tons, with up to 99m. tons of rolled goods. Production, however, actually reached 116m. tons, and rolled goods 92.4m. tons. Shortfalls in the production of the relevant fuels was also a factor here.

Not enough

Despite the huge achievements of this industry, Soviet strategists have not been shy to acknowledge its failings. Mr. Brezhnev had the steel industry—and others—in mind when he told the Party Congress last April: "The situation as regards capital construction cannot be regarded as satisfactory. In short, we are investing enormous sums of money and not getting enough in return. There are several reasons for this..."

The Ferrous Metallurgy Minister, Mr. Ivan Kuznetsov, told the Supreme Soviet at the end of last year that about \$1,000m. would be invested in new iron and steel producing units in the current year. In the newly started five-year period, it is expected that such spending will be more than double what it was in the preceding five years (1966-70). Crude steel output is expected to be between 120m. and 130m. tons this year, reaching nearly 150m. tons in 1975, with just over 101m. tons rolled steel.

The Russians have huge, untapped reserves of iron ore, production of which should exceed 200m. tons for the first time this year. Between 20 and 25 per cent of this will be exported, almost all to the Comecon countries (and most of the rest to Japan and the U.K.). Poland and Czechoslovakia, both countries facing infrastructure problems in the

management of their domestic economies, will take about 12m. tons each. Romania, Hungary, East Germany and Bulgaria—in descending order of quantities taken—all import Soviet ore. Most East European countries, in the classic Soviet pattern, have tended since the post-war Communist take-over, to invest particularly heavily in steel. Production, however, more often than not still lags behind requirements, with a shortage especially noticeable in sheet. Their problems have not been eased in the dialogue with the Russians concerning the poor grade and high cost of the iron ore shipped to them, mainly from Krivoy Rog in the Ukraine. The price paid by the Russians for finished East European goods is also seen by East Europeans as too low.

Czechoslovakia and Poland both rate around tenth in the world's top producing countries, with output in each case over 11m. tons a year. The authorities in Prague, however, have made it plain to the industrial Ministries that the gap between supply and demand is unlikely to be closed until 1975. New investments in the steel industry will go towards modernising existing plant rather than the construction of new plant.

Poland also has problems in meeting domestic demand for steel, not least in its hard-pressed construction industry. However, output in the first half of this year has reached 8.2m. tons—some 130,000 tons above plan.

Romania is giving high priority to the development of its steel industry in this five-year period. An alloy works at Tirgoviste, to have an annual capacity of 800,000 tons, is expected to be working by the end of 1973, and two new blast furnaces are to be built. Among its main customers, Romania counts domestic and foreign shipbuilders.

Hungary, East Germany and Bulgaria have all had output problems in recent years, with Hungary failing to reach

planned levels in the first six months because of a vast re-building programme and "unexpected faults" in the industry. Bulgaria, which is Comecon's smallest producer, has big expansion plans, centred mainly on the Soviet-built Kremikovskii works.

Many developments in the Comecon area will hinge to some extent on developments in the Soviet Union, with whom joint investment projects in this industry have recently been announced under the aegis of the Comecon organisation. The most dynamic growth, so far as the Russians are concerned, will come from the Ukraine (traditional steel and iron ore producer), Central Russia and Kazakhstan. Iron ore prospecting in Siberia and the Soviet Far East is also being encouraged.

Huge furnaces

The Russians currently have three of the world's ten biggest blast furnaces, situated at Novokuznetsk, in Western Siberia (of 3,000 cubic metres), and at Krivoy Rog and Cherepovets (each 2,700 cubic metres). Within the newly started period, the aim is to see at least three of 5,000 cubic metres go into commission, and, by 1980, others of 6,500 cubic metres. In view of the known over-extravagance of Soviet engineers, these grand plans do have a logic of their own.

In the software as well as the hardware of the steel industry the Russians are working to achieve great advances—notably in the fields of oxygen steel-making and continuous casting. Indeed, they have been notably successful in selling licences to the West in radial casting methods and the production of plate steel for car bodywork. France, Finland and India have been among their customers. On the import side, the Russians—in their endeavours to sell huge quantities of natural gas to Western Europe—have placed huge orders for wide diameter steel pipes.

Recession in Japan

By AL CULLISON

Nothing in the Japanese steel industry's rosy expansion schedule of a year ago could possibly have prepared its top executives for decreased production during fiscal 1971. Who could have foreseen the surprisingly new economic policies of President Nixon, coming at a time when Japan's own domestic mini-recession seemed to have just about run its course? Now, however, for the first time in nine years, Japanese steel mills are expected to produce less this year than the previous one.

The Japanese mills in 1971 are expected to turn out a total of about 57.1m. metric tons of crude steel—or approximately 5m. tons below production in 1970. Some specialists even go so far as to predict that output will fall below the 57m.-ton figure.

With the exception of the shipbuilding and motor car industries, all Japanese steel-consuming industries are cutting back their orders and have been doing so for months. Originally, estimates for crude steel production this year had been set at about 68.1m. metric tons, with exports reaching more than 18m. tons. Most Japanese steelmen see a prolonged slump facing the industry, eventually resulting in a much slower yearly growth rate in production even after the semi-recession ends.

Annual increase

More important, at least for steel, the leading executives of the major companies in the industry feel certain that by 1975 Japanese mills will be producing more than 120m. metric tons of crude steel annually. It is interesting to note that the official prediction for mid-decade of the Ministry of International Trade and Industry (MITI) had been 180m. tons before the world's general economic situation began to deteriorate. But present conditions apparently still allow MITI specialists to see an average annual increase in steel output beginning next year of about 8m. tons.

Nevertheless, steelmen in Japan expect yearly crude steel production to level off at around 130m. tons some time between 1975 and 1980, although output might inch upwards towards the end of this decade. Much of the industry's growth, however, may depend to some extent on export expansion, while growth of domestic industry continues to slow down. Since the steel industry has agreed after negotiations with the U.S. to reduce

the annual increase rate of exports to the American market from the current 5 per cent to 2.5 per cent over the next three years, any gains in exports probably will have to occur in shipments to Britain and Western Europe.

This is where the crunch may come. A similar self-restrictive measure is considered more or less inevitable for exports of Japanese steel to the European Community. Japan's shipments of steel to the British market over the past two months, for example, were six times the rate of a year ago, according to reports released in Tokyo. Faced with voluntary limits in shipments to the U.S. and the prospects of similar restrictions involving the British and West Europeans, Japan's steel mills are turning their eyes to China, a market already importing 2m. tons of steel from Japan each year.

The Chinese market is the second largest for Japan, next only to the U.S., which annually takes about 8m. tons of Japanese steel. Last year, for example, Japan supplied 44 per cent of an estimated 13.3m. tons of steel products imported by the U.S. Yet although China has been purchasing more steel from Japan than ever before—even importing rails and pig iron—the Chinese market is not considered likely to expand to the extent that it will be able to absorb much of the excess Japanese production capacity.

It is exactly this problem which has caused the Japanese steel corporations to send their salesmen to Africa, the Near East, Latin America and South East Asia.

Somewhat, the Japanese must find markets for around 5-8m. metric tons of steel and will have to observe orderly pricing and marketing procedures in the process or run into intense opposition abroad. Total Japanese steel exports last year amounted to 18m. tons.

Recent developments in the domestic and international markets have been a serious disappointment to the Japanese steel industry. The industry's executives had expected that demand would continue to support their enthusiasm for large-scale plant and equipment investment. However, the pinch is now causing retrenchments and deferrals. The new Nippon Steel Corporation, for example, has postponed by six months the start of construction of two new blast furnaces, each with an annual production capacity of about 4m. tons. Japan already has eight of

the world's biggest blast furnaces, several of them with interior capacity surpassing 3,000 cubic metres and one just beyond 4,000 cubic metres. It would seem very likely that over the next few years, despite present troubles, the Japanese will start construction of new large integrated steelworks, each having an annual crude steel capacity of more than 10m. tons. Some of these giants will have a yearly capacity of approximately 20m. tons. Operation of most of these steelworks will begin in 1977.

Clashes expected

Over-production capacity is rapidly developing and clashes within the industry concerning the starting of new construction can be expected. Yet no steel company wants to unilaterally curtail investment plans and, as a result, MITI authorities are monitoring and guiding the six major blast furnace operators, which account for slightly more than 90 per cent of total steel output in Japan. It appears that under this plan, new blast furnaces entering operation will begin by limiting production to 30 per cent of capacity for the first six months and to 70 per cent for the next six months.

At present, four major steel producers—New Nippon Steel, Nippon Kokan, Sumitomo Metal and Kawasaki Steel—may start construction of one blast furnace each between now and the end of fiscal 1972 (March 31, 1973). Each of the furnaces will have an interior capacity of 4,000 to 5,000 cubic metres. The firms are expected to close down a blast furnace or furnaces equal to 2,000 cubic metres as each new furnace begins operation and probably will keep them closed now until 1975 unless authorised by MITI.

Japan's steel captains have their other arguments, among themselves, but only one or two express actual worries about the future or see their industry bogging down like the steel mills of America. Almost to a man, in the long run they are optimists. They base their grand plans for to-morrow on the belief that the current economic slump at home and the host of financial troubles abroad are only temporary and that an insatiable demand for steel products will return to support Japan as the world's third largest steel producing country, if not next year then the year afterwards.

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WORLD STEEL VII

Australia and S. America will be main growth areas

By HENRY CLEERE

Cynics have said in the past Europe but now superseded in the latest and most sensational in a series of large projects that have been put forward in the past few years for both sides of Australia, utilising the massive iron-ore reserves and the iron-ore mountains of the west. The companies that have been associated with these projects read like a directory of the leading companies in the iron and metals field—Armco, Bethlehem, Kaiser, RTZ, August Thyssen, GKN and even BSC. At present only one major integrated plant is under construction, the joint BHP-GKN works at Westport Bay, Victoria, with a planned initial capacity of 2m. tons by the end of 1973, rising to 4m. tons in the final stage.

However, it is certain that the elaborate courtship ritual that is in progress elsewhere will soon result in the formation of some stable groupings, and it is not unrealistic to forecast an increase in capacity of some 20m. tons in Australia by 1980.

No likelihood

The great majority of the steel plants and projects in the non-traditional steelmaking countries can be considered in this light. There is no likelihood of their assuming a more important role in the global industry scene in the coming years, unless they are situated in countries that prove to have hitherto unknown reserves of high-grade ore in large quantities. There are, however, several countries where marked and rapid expansion may be expected in the coming decade, notably Australia, Brazil and Venezuela, where there are large iron-ore resources.

Since 1966, Australia's total steel production has risen by 25 per cent, in keeping with the world trend. The Australian industry has up till now been in the hands of a single company, BHP, whose development policy has been cautious and modest. During the past decade, however, exports of iron ore from Western Australia have soared, and the Government of that State, under the leadership of its energetic and ambitious Minister of Industrial Development, Charles Court, has taken vigorous steps to encourage capital investment in major iron and steelmaking plant in Western Australia.

The most ambitious project to date is the Kwinana plant, in Steel Ltd., near Auckland, which BHP, Amstar, Colonial Sugar Refining, Selection Trust, and C. Itoh are co-developing. An output of 12m. tons has been suggested, involving investment of \$1,500m. This is, however, just

the expansion of the Brazilian industry may well be explosive when it gets under way. The main obstacle is the age-old problem of South America—political instability. Foreign investment will be cautious in the light of recent events in Peru and Chile unless assurances of political stability can be obtained from the Brazilian authorities.

These three are the major growth areas. There will be small-scale expansions in other steel industries, and this is at present being undertaken by the W. S. Atkins Group, the British consultants. It is well known that other studies are also in progress, inspired by both Brazilian and foreign companies.

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Dampier, in the north-west of Western Australia, can handle ships of up to 100,000 tons, exporting iron-ore mined at Mt. Tom Price, 182 miles inland.

Glimmer of hope in the U.S.

By NICHOLAS COLCHESTER

Large reserves

A similar development potential—the combination of large iron ore and fuel reserves—exists in Brazil and Venezuela. Coal is not so abundant in these countries as oil and natural gas, and so it is likely that future development here may be associated with new technologies, notably the use of direct reduction in one or more of its manifestations.

In Venezuela the State-owned Sidor plant at Ciudad Guayana is expanding rapidly to 1.6m. tons per year. However, the most significant development in this area is probably the Nucor (gaseous direct reduction) plant of U.S. Steel, which recently went on-stream and which is scheduled for an output of over 1m. tons of pre-reduced iron pellets per year in its initial phase. Sidor has an entitlement to 25 per cent of the production of this plant and has plans for a large increase in electric steelmaking furnace capacity. This would appear to be an indication of future development: a massive expansion of steel production in Venezuela this year the worst since 1967.

There is a chance that autumn 1971 may turn out to have been the crisis point in an illness with which the U.S. steel industry has been suffering for over five years. There is a chance that this illness may yet take its toll, mergers may take place, certain companies may go into bankruptcy, but the general feeling is that 1972 will produce something of a recovery.

The basis of the industry's malaise is that steel demand has not increased at all, on average, since 1965. It has wobbled for the whole of that five-year stretch around the 100m. tons-a-year mark. During the same period imports have risen from 9m. tons to around 15m. tons and worse still the U.S. steel industry has poured about \$10,000m. into new plant and equipment over the same period. Total domestic steel shipments in 1971 are now expected to be below 90m. tons which will make this year the worst since 1967.

It really has been a year of trauma for the industry, caused mainly by the triennial wage talks and their effect on the month for steel shipments in 30 years. The industry was said to be running at about 40 per cent of its productive capacity. Some plants which had closed down in anticipation of a strike had not been re-opened six weeks later.

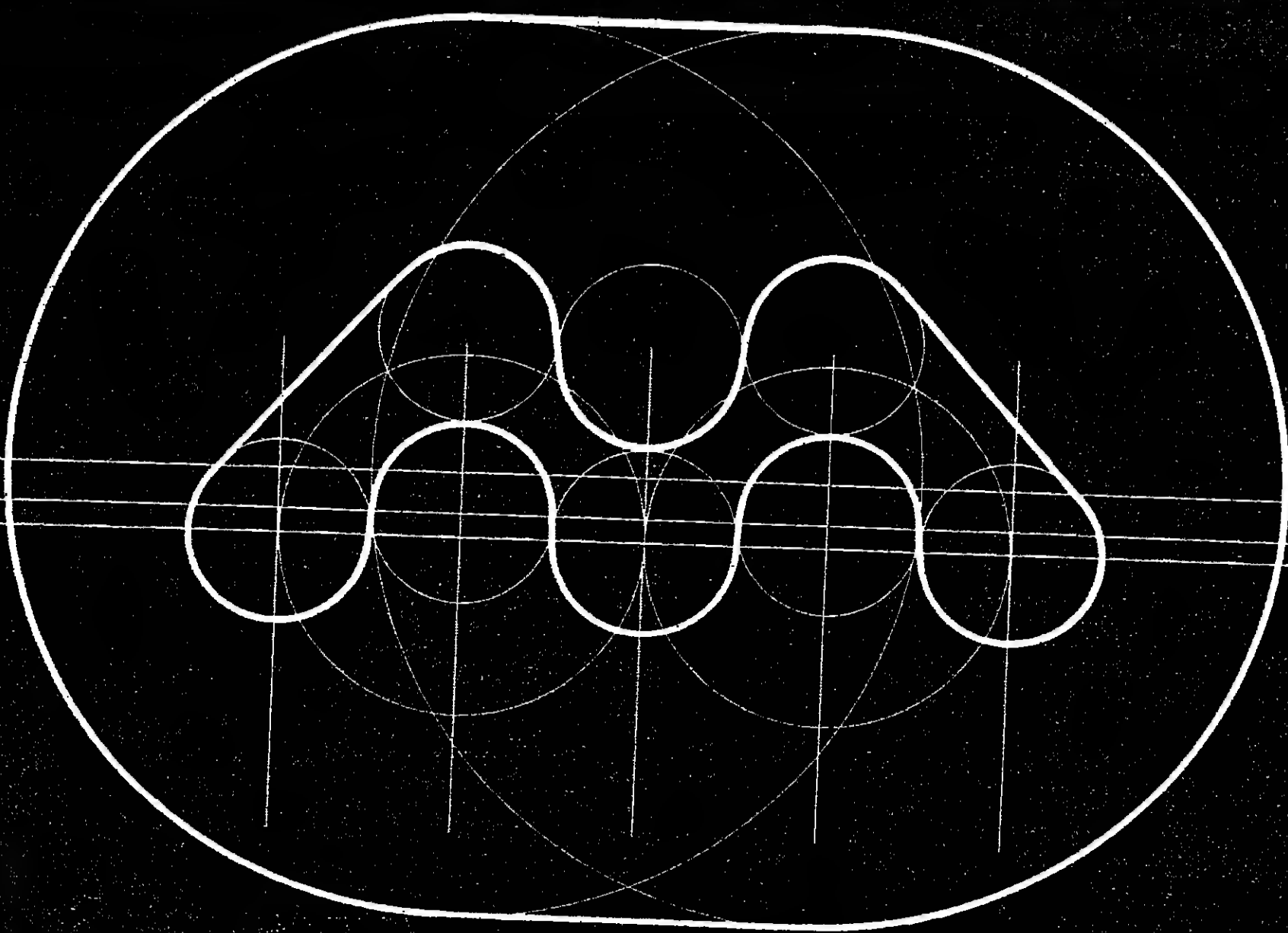
The future does, however, look rosier. In the first place the order level should start to pick up again soon as the users get their inventories back to the normal. The prediction is that steel consumption should be quite high in 1972—perhaps 105m. tons—and the producers feel that they will be asked to provide perhaps 93m. tons of steel. There are of course some restraints in the business and they are talking in terms of shipments of over 100m. tons. The other encouraging development is on the import side. The Japanese have agreed

to hold the growth to their U.S. imports down to 2.5 per cent a year, which is roughly the U.S. steel market's long term growth rate. This means that the domestic producers, who have been trying with little success to raise their prices in a buyer's market, will be able to push through some of their mark ups (phase two of President Nixon's new policy permitting) without losing even more orders to their overseas competitors. These competitors, principally the Japanese but also the EEC, will at any rate be hampered by the effective devaluation of the dollar and the import surcharge if it lingers on.

The Japanese have added an important agreement to the voluntary system of self-restraint that they have just submitted to the State Department. They have incorporated a scheme whereby they will reduce the volume of their imports of special steel to the

U.S. The Japanese production over the last three years in so far as tonnage of steel is concerned, but they have shifted the value of imports, have been trying with little success to raise their prices in a buyer's market, will be able to push through some of their mark ups (phase two of President Nixon's new policy permitting) without losing even more orders to their overseas competitors. These competitors, principally the Japanese but also the EEC, will at any rate be hampered by the effective devaluation of the dollar and the import surcharge if it lingers on.

All these factors add up to a glimmer of brightness for an industry that has been through such a bleak period that the financial world has begun to anaesthetise to its continued woes. At the moment the share of U.S. Steel, the largest producer, and Bethlehem Steel, the second largest, are standing at \$30 and \$26 respectively. A decade ago they were at heights of \$91 and \$49. Perhaps the time has come to reconsider



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WORLD STEEL VIII

Wide variety of coatings

By VIVIAN EVANS, Divisional Manager, Marketing Services, BSC Strip Mills Division.

Steel sheet is rarely used without being given a surface treatment by one means or another, and manufacturers have adopted a variety of processes to protect the metal and enhance its appearance—some galvanise, some paint, some stove enamel, some apply a vitreous enamel finish—but all these operations are costly in terms of capital investment, labour and space.

The steel industry has long recognised that by providing sheet with the added bonus of a protective coating it could help the manufacturer to overcome his problems and reduce his costs. The addition of a zinc coating by hot dip galvanising process was introduced as early as the end of the last century and galvanised corrugated sheet became a familiar sight the world over.

The installation of up-to-date plant and the re-equipment of existing lines over the last few years has led to further improvements, so that the BSC can now offer a much wider range of surface finishes, including minimised-spangle and extra smooth finishes, differential coating thicknesses, and an iron-zinc alloy coating with superior welding and painting characteristics.

Another first

A thick coating of zinc is not always necessary or desirable, and the British steel industry scored another first when Zintec was introduced in 1947. This is a sheet electrolytically coated in a continuous process with a very smooth and very thin zinc coating (about one-tenth of the hot dip coating) which is sufficient to protect the sheet during fabrication and provides a first-class base for painting. The production of electro-zinc coated sheet is now widespread, and the benefits it offers to the manufacturer has ensured its extensive use, particularly for those applications such as consumer durables where a high quality surface finish is essential. To keep pace with the demands of modern industry, the BSC is now commissioning a line which will provide electro-zinc coated sheet in coil in widths up to 59 inches. The line is expected to start producing in volume towards the end of this year.

The philosophy of providing a pre-finished sheet for the manu-

facturer has taken a dramatic stride forward in recent years with the introduction and growing acceptance of paint-and-plastic-coated sheet. The attributes of colour and texture have been added to the corrosion resistance of zinc-clad steel. The advent of the steel/vinyl laminate Stelvetite in 1967 at Shotton, followed in the mid-1960s by the installation of the Colorcoat coil coating line at Gorseinon, made available an extremely wide range of pre-finished material, including wood-grain laminates, plastisols, organosols, alkyls, acrylics and many others.

Because of its decorative appeal, plastic coated sheet was originally aimed at fabricators of household, goods, office furniture and so on, but it rapidly became apparent that there was—and is—a tremendous potential market in building. Much more attention is now paid to the aesthetic appeal of agricultural and industrial buildings and the colour which plastic-coated claddings can bring to the environment has added a very considerable bonus to their qualities of corrosion resistance and freedom from maintenance.

The situation to-day is that both the Stelvetite and the Colorcoat lines are very heavily loaded, with lengthy order books. The BSC has declared its confidence in these products by investing in an additional Colorcoat line, which will come into operation at the end of the year, and a further Stelvetite line to come on stream in 1972, giving a total capacity of more than 200,000 tons per year.

The latest addition to the range of coated steel sheets is

Elpbal, an aluminium-coated sheet, which has been produced on a pilot production line for some time and will be going into volume production early in 1972 when the new wide coil line is commissioned. Elpbal is produced by the electrostatic application of high-purity aluminium powder to the steel surface, followed by compaction rolling and sintering. Its most obvious feature is that it offers corrosion resistance at elevated temperatures which previously necessitated the use of expensive alloy steels or non-ferrous metals, and it is eminently suitable for exhaust silencers and other heat exchangers. It also has an excellent surface finish which could lead to its use for such things as lithographic plates, trim on automobiles and consumer goods, coins and so on.

Many possibilities

Even more important, powder coating technology can be extended to other metallic coatings such as copper, nickel and chrome, thus offering many interesting possibilities.

Strangely, the most important coated steel product is familiar to all, but is often not recognised as steel. This is tinplate—thin mild steel sheet coated on both sides with a much thinner coating of tin (a typical can or "tin" would be about 0.008-inch steel with 0.00002-inch of tin on each surface) which combines the strength of steel with the corrosion resistance of tin.

Consumption of tinplate in the U.K. is now about 1m. tons per year; 90 per cent. is used in packaging, 75 per cent. being for food packaging. Consump-

tion of tinplate is expected to increase steadily in the foreseeable future. Thinner steel and thinner coatings are used now than ever before. Tinplate made from new stronger (double reduced) steel is used widely for beer and soft drink cans—a fast-growing market—and shortly there will appear on the market cans made from 'tin-free' steel with a new coating—Hi-Top, a duplex layer of metallic chromium and chromium oxide which has good lacquer adhesion.

The development of new types of sheet from which to make one-piece cans (without a soldered seam) and steel easy-opening ends is also taking place. The easy-opening aluminium end has been of importance in helping the tinplate can in its penetration of the beverage market, and a number of steel easy-opening ends are in development for both beverage and food cans. They offer the only satisfactory solution for easy-opening food cans, a development which should

take place on a large scale before 1975. Manufacture and evaluation of very thin steel—down to 0.001-inch—by novel techniques is also well under way. These and other developments will ensure that tinplate and related products continue to be not only important in the steel spectrum, but also the most important packaging for processed foods and many other products.

To conclude with a glimpse into the future, new techniques are now being investigated for the application of lacquers. These processes are entirely new technologies and should give the capability of producing new and advanced coatings within the foreseeable future, mainly based on vacuum and powder techniques. The BSC is determined to remain in the forefront of the new technologies being developed for coating steel sheet and the research programmes already under way should ensure that our reputation as innovators in this field is maintained.

Demand for stainless falls

By DAVID WALKER

Stainless steel is in the doldrums. Throughout the world, demand has slumped at a time when production facilities are being increased.

In many producer countries, not least Britain, imports at the same time have soared. A product for which regular growth has in the main been taken for granted has proved itself as vulnerable as other areas of industry to forces often outside the control of the organisations manufacturing it.

The problems really started two years ago, when the 1969 Canadian nickel strike forced prices to soar upwards thanks to the resulting world shortage of a basic stainless steel constituent.

Thus, not only was the size of the market reduced at a time when steel generally was going through peak demand conditions, but the concept of stainless steel as a material with a stable price pattern was shattered.

None the less, confidence in the industry remained high, as was demonstrated by the number of projects for additional manufacturing facilities.

Not enough

That not enough marketing had been done by some producers in the U.K. was quietly admitted. Difficulties arising from political interference in the industry by both Socialist and Tory governments were named as contributing to the situation.

But, basically, it was thought that more normal price levels would be enough to bring about a resumption in demand. In fact, even with the ending of the nickel shortage and the first signs of a nickel surplus, demand has continued to fall. U.K. production of finished stainless steel in 1970 was well

down on the previous year, at 116,430 tons against 121,370 tons, reflecting the cutback in orders.

In the all-important cold-rolled sheet and strip sector, which accounts for 50 per cent. of U.K. output, demand in this country dropped by 10 per cent. on 1969. For the first half of this year, sales were again 10 per cent. below those in the corresponding period 12 months before.

In effect, there has been no growth in home consumption since 1968. As the supply situation has eased, the stainless industry has mirrored the downturn in demand for steel generally caused by the downturn in industrial investment and the lack in real terms, of consumer spending.

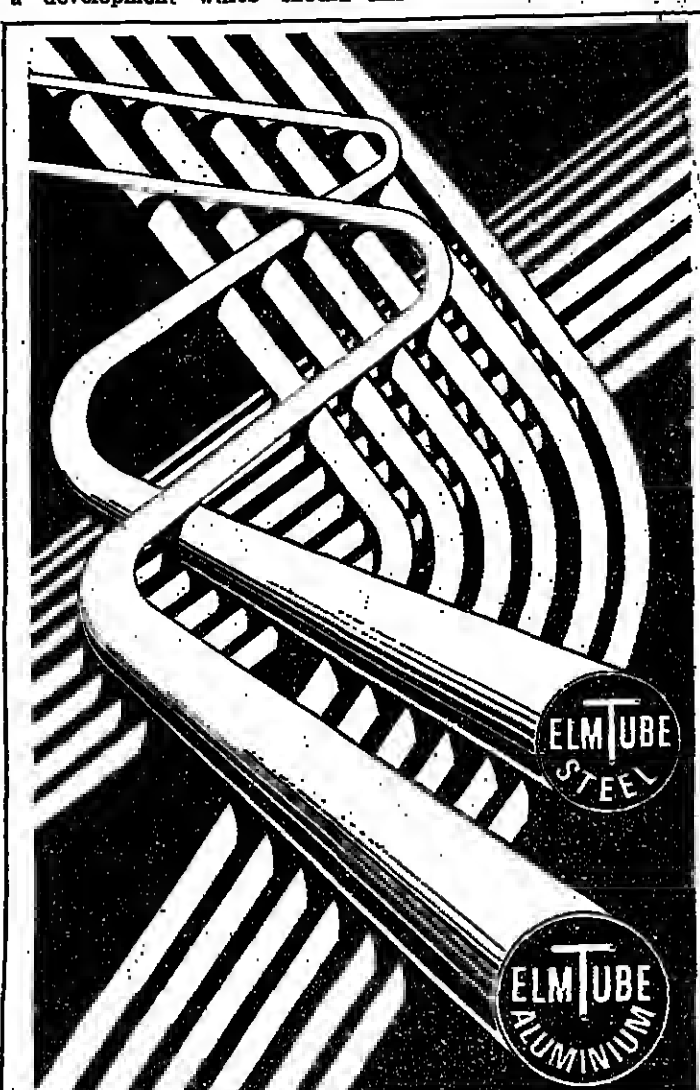
The U.K. industry has been given a shock. After seeing an 8 per cent. annual growth rate for some time, it has reached a plateau. And, even though there is no doubt that demand will grow again, there is now thought to be no prospect of that rate being resumed.

The rest of Europe has been going through the same situation with possibly France alone faring better than average. Even in Japan, the prospect of a 15 per cent. annual growth rate appears now to have been ruled out, current thinking being in terms of only an 8 per cent. yearly advance.

Alongside this, imports have gone up to reach 37 per cent. of apparent U.K. consumption. Although Japan is often regarded as the prime threat here, it is in fact only second in the table of importers after France, and followed by Sweden and Canada.

At the same time, U.K. exports have been declining fol-

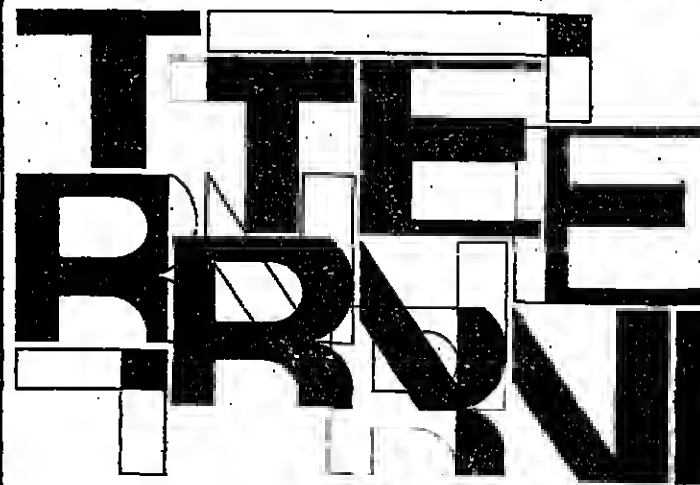
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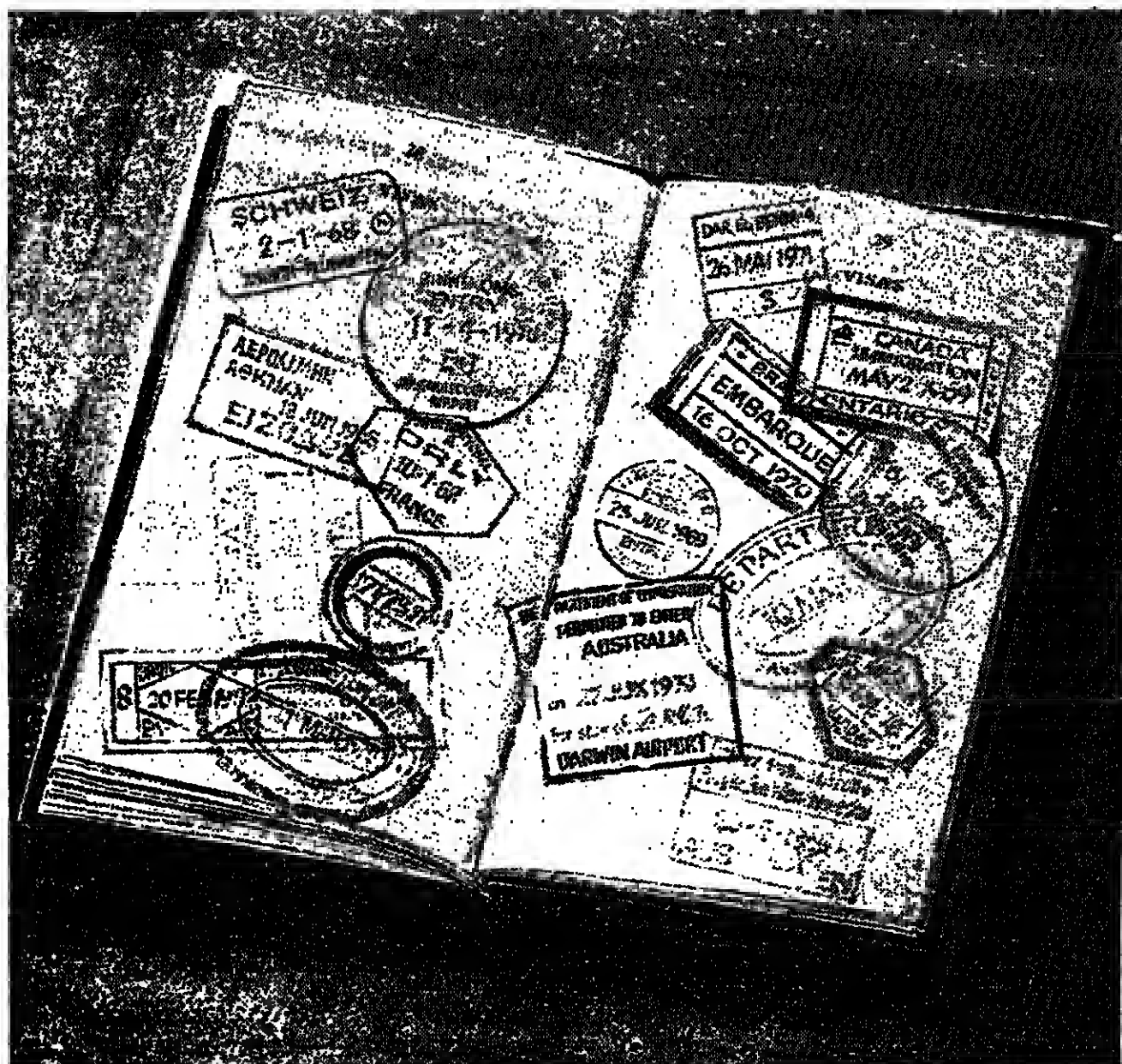
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ملكو من التصدير

WORLD STEEL IX

Shipbuilders unhappy with British prices

By JAMES McDONALD, Shipping Correspondent

The British shipbuilding industry has been bedevilled by rising costs and the shipbuilding industry, which has been fairly static in terms of output in recent years, producing between 1.1m. and 1.3m. gross tons of ships annually, consumes about 500,000 tons of heavy steel plate a year, at current prices costing about £35m.

But relations between the shipbuilding industry and the British Steel Corporation have been far from happy over the past two years. Both industries have been bedevilled by rising many claims that the original price rise proposed, of 22.2 per cent for heavy plate, would price them out of the international shipbuilding market.

In January, 1970, shipbuilding steel prices were raised by over 8 per cent, and again last October by another 8 per cent. Then, last March, British shipbuilders faced the threat of a 22.2 per cent further increase on shipbuilding plate under the British Steel Corporation's proposals for an average rise in

prices of 14 per cent. This led to an outcry from all manufacturing industry, with the shipyards among the most vociferous. The industry was already licking its wounds over the abolition of the forward fixed-price ordering arrangements it had enjoyed in previous years. This arrangement had been partially eroded by the BSC last January, when it announced a hefty premium on forward fixed-price contracts. The suggestion then was that shipbuilders could either pay the premium or gamble on the price of steel being lower in two years' time than the cost of the fixed forward price plus premium. It is believed that a number of yards, with ships for delivery up to 1974, accepted the fixed price plus premium. Then in February the forward fixed-price contract system was completely abolished.

costs including labour—to upset all the calculations upon which British shipbuilders had bid for contracts. Even price rises in U.K. steel in 1969 upset the fixed price calculations on which British shipbuilders had tendered for vessels. Early last year Swan Hunter said that the 1969 steel increases were adding to the cost of ships' hulls alone between 11 and nearly 30 per cent, according to the size of the ship.

Credit guarantees

Until then no steel was imported by British yards, except in the form of finished products, and 90 per cent of the vessels built in U.K. yards are constructed under Government credit guarantees. The 20 per cent limit has had, in the past, the effect of preventing U.K. shipbuilding making any serious attempts to purchase steel from abroad, although they suspected earlier this year that they could buy ship plate for as much as £10 a ton less than the new BSC price of nearly £70 per ton.

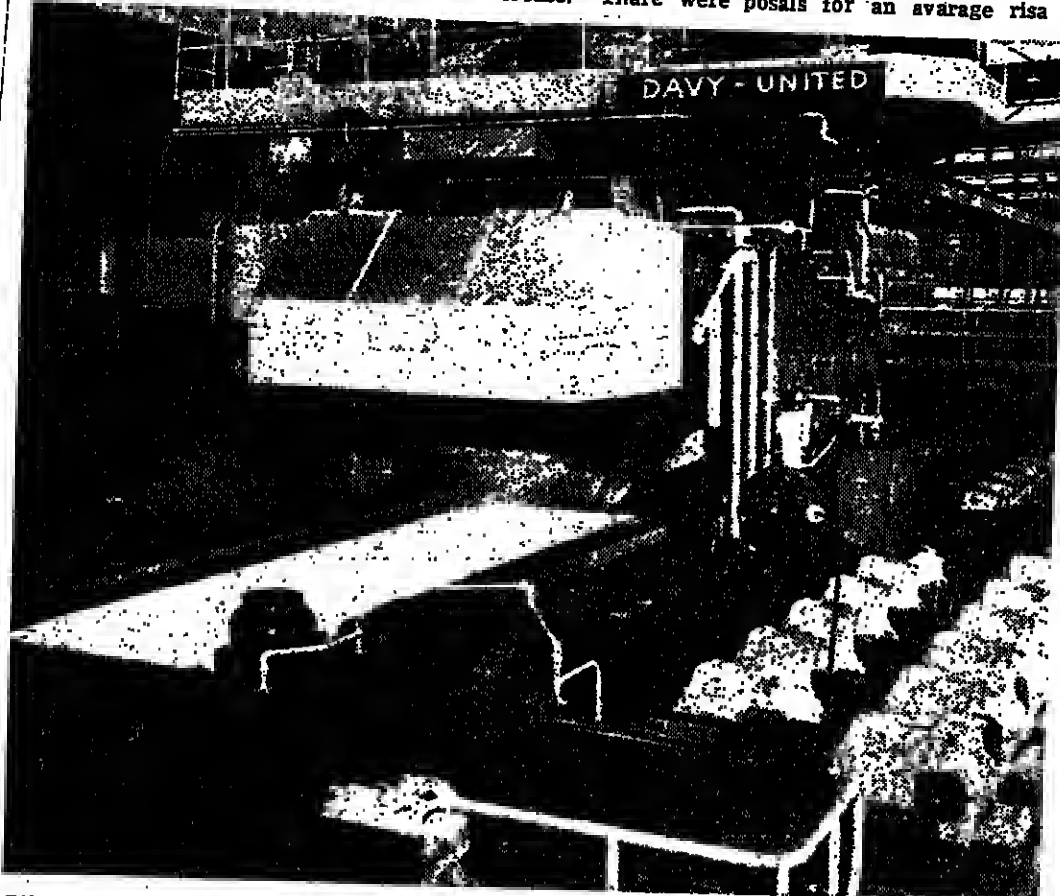
In the event, important imports of shipbuilding steel have not occurred. Most shipbuilders have long-term supply contracts with the BSC, on one hand, and on the other, the Japanese, who had showed willingness to provide cheaper steel, balked at the last moment.

With the current confusion over world exchange rates, but leading inevitably to an upward revaluation of the Japanese yen, Japanese steel must be more unattractive to British and Continental shipbuilders.

Strong opposition

Attempts to renegotiate existing fixed-price forward supply contracts with shipbuilders but met with strong opposition from the shipbuilders. At that time Mr. Norman Sloan, Director of the Shipbuilders' and Repairers' National Association, commented: "We are still working on fixed-price contracts for building ships, and losses are expected on them." They were not in a position to renegotiate the contracts without further increasing these losses.

Steel price increases over the past year or more, in fact, had announced a relaxation of the credit rules which limit steel



The 90-inch wide four-high Davy-United mill in the plate rolling and finishing plant at the Shepcote Lane Works, Sheffield, of Firth-Vickers Stainless Steels Ltd.

FREE WORLD PRODUCTION OF STAINLESS STEEL INGOTS AND CASTINGS

	1955	1960	1964	1965	1966	1967	1968	1969	1970
U.S.	1,105	908	1,307	1,353	1,498	1,315	1,297	1,420	1,163
Japan	50	297	691	660	755	1,081	1,198	1,547	2,050
W. Germany	151	286	301	326	347	393	462	532	558
France	70	191	235	246	279	328	367	423	468
Sweden	86	180	255	280	295	308	355	371	411
U.K.	161	251	258	251	260	252	258	266	286
Italy	20	63	103	121	187	210	233	221	245
Others	57	97	150	158	171	188	200	219	199
Totals	1,700	2,275	3,300	3,435	3,790	4,075	4,370	5,000	5,380

Stainless—(Cont'd)

Continued from previous page

lowing the peak reached in 1969, in the face of surplus capacity in virtually all other producer countries.

For world capacity is continuing to rise. Between now and 1975, potential world-wide production of cold-rolled stainless steel will have increased by 500,000 tons a year bringing the total to 2.5m. tons against the present 2m.

World demand, however, amounts to only around 1.6m. tons and shows few signs of ducers, taking some 50 per cent of the plates market with West Germany, for example, against 30 per cent, three years ago, with Sweden, South Africa, far as the U.K. industry is concerned, entry to the Common Market could ease the situation, with the strong possibility that the price flexibility enjoyed by other European Economic Community steel producers will be extended to the British manufacturers.

Even so, without increased demand, there seems little that can be done to stem the tide of imports. The British industry can offer customers service and a technical back-up, giving it some slight innate advantage over importers. But stockholders now account for 80 per cent of the market, which means that those advantages are being eroded.

The problem has been worsened by the capacity situation, which has forced overseas manufacturers into cutting prices to a profitability level which would previously have been unacceptable.

And the comparatively high prices still existing in producer countries as against those with no stainless steel manufacture has made the industrialised countries, like Britain, prime targets in the drive for sales.

Once again, the imports situation is virtually world wide, particularly badly hit. As the U.K. industry is concerned, entry to the Common Market could ease the situation, with the strong possibility that the price flexibility enjoyed by other European Economic Community steel producers will be extended to the British manufacturers.

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Acute threat

Imports, once more, pose an acute threat to the U.K. producers, taking some 50 per cent of the plates market with West Germany, for example, against 30 per cent, three years ago, with Sweden, South Africa, far as the U.K. industry is concerned, entry to the Common Market could ease the situation, with the strong possibility that the price flexibility enjoyed by other European Economic Community steel producers will be extended to the British manufacturers.

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Fresh markets

Of crucial importance is the finding of fresh markets. Potential is seen particularly in the building and plumbing industry, both in such things as stainless steel sinks and on the structural side. In catering equipment, too, the world-wide pattern of hotel development and up-dating of restaurants should produce additional demand.

The automotive industry, already a big user for vehicle trim purposes, is also seen as an even bigger potential customer. Stainless steel bumpers, widely used in France and once available here on some coach-built cars, are only one item which the industry hopes to see in greater use. Silencers are another area in which stainless steel could be used to everyone's advantage.

But fresh markets take a long time to develop. Meanwhile, the only thing certain is that competition will continue to intensify between the world's stainless steel producer countries. The industry's problems could yet worsen.

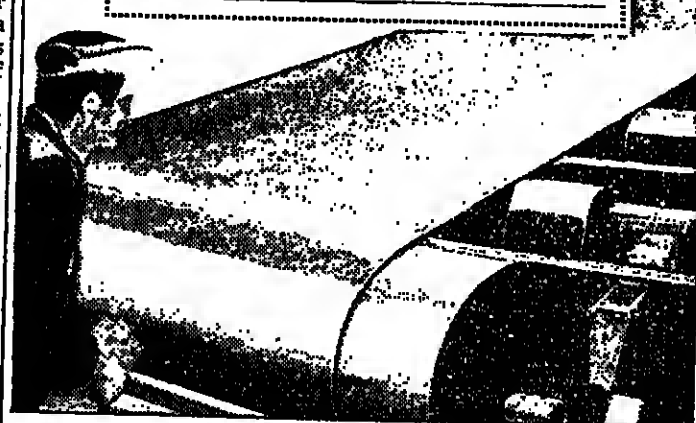
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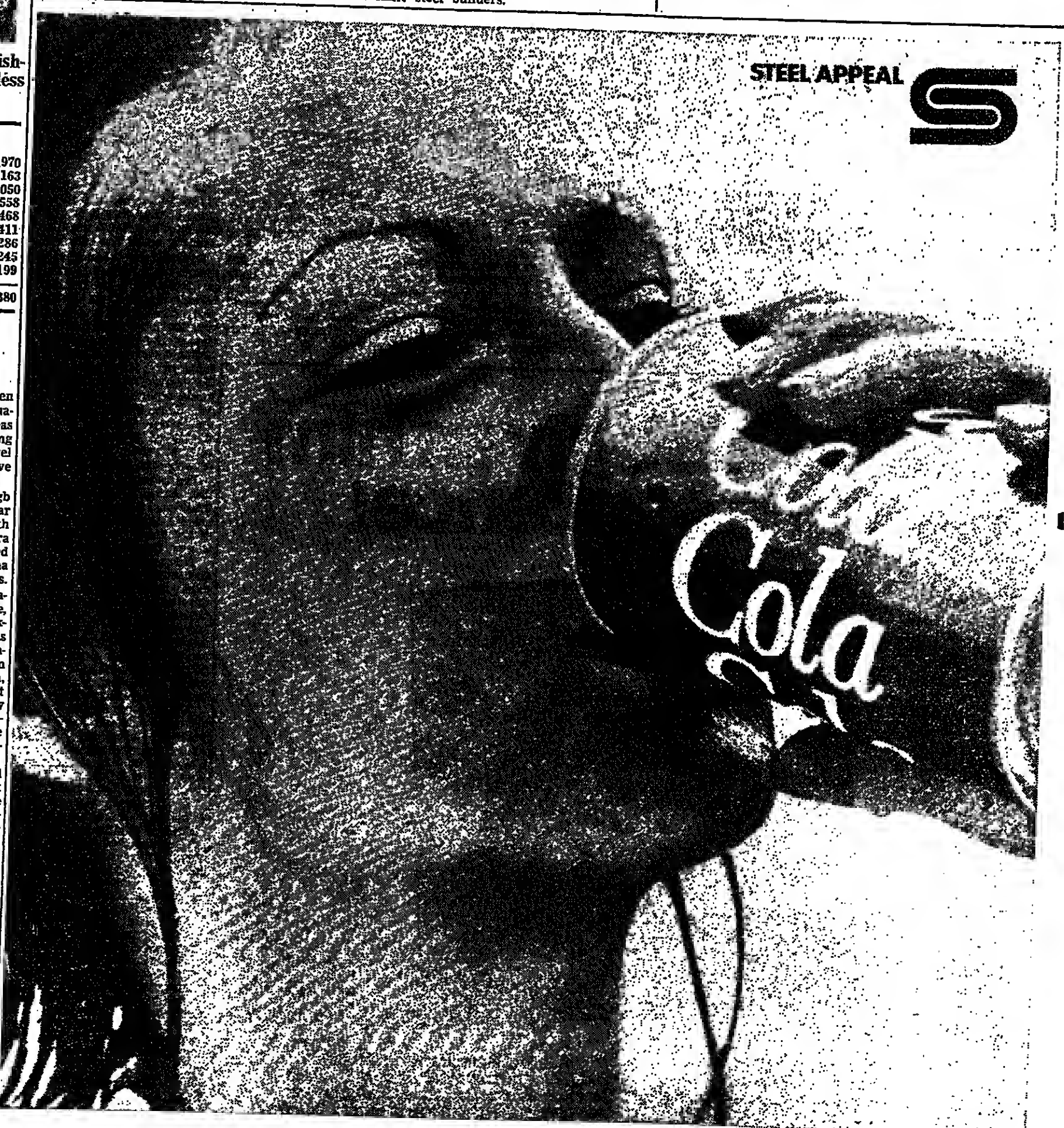
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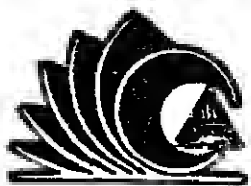
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WORLD STEEL X



Scrap burner at work on an old main line steam locomotive.

Underrated role of the scrap industry

By DAVID WALKER

Britain's reclamation trades areas of the country. On a different level, planning permission for expansion is made hard to obtain because of that. Tens of thousands of people are involved in the industry, from totters, gipsies and boys with barrows, to giant companies which are household names, handling 1m. tons or so of scrap a year each, and providing Britain's steel industry with 7m. to 8m. tons annually or, including the further 7m. tons a year arising in steelworks, a quarter of its raw material requirements.

Perhaps nowhere is that more true than in the ferrous scrap industry. Suffering from a consistently undervalued sector of the country's industry. Even at this time of particular awareness of the dangers to the environment caused by waste products, there appears to be little knowledge of the valuable role played by scrap businesses both in cleaning up the countryside and providing manufacturing business with basic raw materials whose absence could add to considerable increases in our imports bill.

In between come tiny businesses, doing their own collections of abandoned ferrous and other material and undertaking some rudimentary sorting of it. Generally, they sell to the 800 or so medium to large merchants handling 5,000 tons upwards a year, doing most of the central collecting and employing extremely sophisticated equipment in many cases.

Some 400-600 of those sell directly to steelworks themselves; the remainder deal with the others before their products too find their way to the steelmakers.

At the top of the tree are the household names like the George Cohen 600 Group, and Thos. W. Ward, with extensive interests now outside scrap. A further 30 or so others are important in their own areas only, but still play an extremely significant part in supplying the steel producers with an essential raw material.

The totters and so on alone supply 10 per cent. of all scrap, much of it of very high quality, and meet a national need in the cleaning up of the countryside. Overall, the balance of payments saving through the use of scrap in steelmaking is estimated at about £100m. a year. That itself is a valuable contribution toward the restoration of the nation's health; no estimate can be placed on the value of the work in clearing the country of objects which would otherwise just be left to rot. Thus, in the London area, the scrap industry rids the streets of around 650,000 old cars a year. For the whole country the figure is over 1m.

The industry has also been a fast changing one, even in the traditional ferrous scrap sector, despite the rapid development of the non-ferrous trade, which is now the more important. Before the war, it has been accurately said, scrap was "a minor and mucky ancillary to the iron trade." To-day it is big business in its own right. In the last few years, it has become far more capital intensive, and consequently far more economical in its use of labour. A large scrap processing plant to-day can cost more than £1m.

A few years ago, the average scrap yard would have got by perfectly adequately with a crane and some small shears. The main work would have been done by men using comparatively simple hand tools. What the steel industry demands placed on the industry, particularly the stringent quality requirements of the steel producers, which, in many instances, according to the industry, are significantly higher than those insisted on by their overseas equivalents, have forced changes. The scrap industry has been forced to change. The scrap qualities has to be graded 600 and the metal recovery correctly, cleaned from both dirt and contaminating materials, cut and, where necessary, baled and compressed. The result has been to force the up-to-date scrapyard to gear itself to a flow line production operation, necessitating heavy investment in capital equipment.

Modern equipment

A comparatively simple—though far from simple compared with what was common 20 years ago—scrap shearing machine can cost over £30,000. Earlier this year, for example, Harris-Economy introduced hydraulic shears, designated the MCBS 15-300, able to process up to 1 1/2 by 28-inch mild steel plate. These typify the modern equipment required by the scrap merchants. The shears incorporate pre-compression box methods, manually operated so that the squeeze can be most effectively applied depending on how the charge initially lies in the box. With scrap is compressed into a mass more suited to shearing, allowing the production of the

even-sized pieces sought by steelmakers.

It is not just in the scrapyard that heavy capital equipment has become essential. Getting scrap metal, particularly from large objects like

discarded vehicles, to scrap processing plants in sufficiently large quantities is a major problem facing the contractors. One answer is the use of mobile scrap balers, which can be taken from one vehicle dump to the next to compress the scrap into compact bundles ready for transport to the yard.

Such machines can be gigantic. The Bird Group recently ordered three from Lindemann of Germany, which are able to handle trucks and lorries with ease, converting them within minutes into small pieces of re-usable scrap. Eleven and a half feet wide and 13 1/2 feet high, each weighs 112 tons, equalling in power some of the biggest equipment permanently installed in scrapworks. They compress a large, worn-out commercial vehicle and then guillotine it into compact bundles measuring about 3 feet square by 1 foot deep.

65-ton tractors

To move each from dump to dump, two British Leyland 65-ton tractors are used, with the machine between them on two bogies making up a 32-wheeled trailer. The total investment by Bird in the three units, including cranes, tractors, trailers and conveyors, is in excess of £500,000.

The need for greater capital investment has come, too, with the growth in the use of coated materials, a natural consequence of the trend for metal goods to become lighter. The contamination of metal involved in refrigerator, car and washing machine manufacture has become a growing problem for those whose business it is to reduce it to its basic constituent ready for re-use in the steelmaking process.

With it, there has been a reduction in the numbers employed in the scrap trade. In the 1960s, the total is estimated to have fallen by one-sixth, and that again is a continuing process. As the same time, the growing capital intensity of the industry has brought problems, which have been aggravated by the present cutback in demand for scrap in this country and overseas. Some areas have seen an over-concentration of heavy expenditure, with virtually neighbouring businesses each buying equipment sufficient to satisfy the needs of both and consequently working way below capacity.

Common Market entry, it is thought within the industry, should hasten the formation of larger units, and thus do a great deal towards the overcoming of that effective waste of resources.

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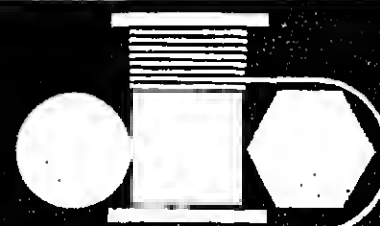
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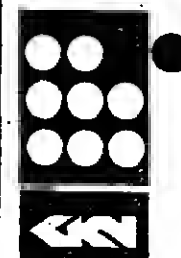
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WORLD STEEL XI

Iron ore market in state of uncertainty

By JOHN BAILEY, Metal Bulletin

The international iron ore trade must feel that it has entered no-man's land at present. The sharp downturn in world steel production has hit the iron ore market just when confidence was returning after the depressed conditions of the 1960s. During that period there was a steady growth in ore demand—world production rose by nearly 45 per cent. between 1960 and 1970 to 754m. metric tons—but due to over capacity ore prices were severely eroded. It was not until the end of 1969 that the market turned the corner in the wake of the steel boom and prices showed a significant recovery in the following year.

Obviously, steel production plans hold the key to the future of the iron ore business. In the present uncertain climate existing ore producers are taking a fresh look at their expansion ideas and, no doubt, potential newcomers to the trade must be asking themselves some searching questions, because iron ore is an expensive business to enter.

The tonnages between high and low demand forecasts can be considerable. For example, Japanese steelmakers originally proposed to produce between 155-160m. metric tons of steel by 1975, which would require some 175m. tons of imported ore (imports in the current fiscal year are expected to reach 118m. tons), but due to the changed steel market conditions this target has been trimmed back to 130m. tons, calling for some 145m. tons of ore, a difference of 30m. tons a year.

The cutbacks in output have forced steelmakers in most countries to reduce ore consumption sharply, and they have had to delay material already contracted for. This will mean that considerable tonnages will be carried over into 1972, which makes prospects for next year very unpromising. The position of these ore producers without a great deal of contractual cover is especially bleak, and it can be expected that severe price-cutting will again return to the market.

Growing power

Much has been written about the growing power of the Organisation of Petroleum Countries (Opec), which claims to be responsible for the substantial increase in oil prices in the past few years, and it is significant that a number of iron ore exporting nations are attempting to emulate Opec by getting together in an effort to counter

the buying power of the big iron ore consumers. Their position is, of course, greatly different from their oil counterparts. For instance, ore suppliers are not dominant to the same extent as Middle Eastern countries dominate the oil business. In addition, there is no foreseeable danger of the world ever running short of iron ore, as has been predicted in the case of oil because total world reserves have been estimated at a staggering 783,500m. tons (comprising 251,300m. tons of reserves and 532,200m. tons indicated).

Although the so-called Iron Ore Club has important members such as Brazil, Venezuela, India and Liberia, it suffers to the extent that it has failed so far to attract the support of major ore producers like Australia, Canada and Sweden. In the long-term, however, its influence is bound to be felt, particularly in areas such as pricing policies—it is already working on the establishment of minimum export price guidelines—and such concepts as maximising the amount of processing of ores in country of origin will be pursued. Certainly, thoughtful ore buyers are watching political developments very closely.

A subject that is no doubt under discussion in ore producing circles is capacity, as it is an area that any cartel would like to control. However, without support from countries such as Australia, there would be little chance of success for any scheme designed to prevent excess capacity depressing prices.

Australia has, in fact, been a fantastic success story so far as its iron ore exports are concerned and in the space of a decade has emerged as the most dynamic force on the international ore market. The big new mines in Western Australia have already boosted the country's output to 51m. tons and it is expected to reach 100m. tons by 1975 and this could be doubled by 1985. Australia's ambitions are by no means confined to exporting ore; she has plans to increase processing right up to the steel stage.

Australia's leading ore exporter, Hamersley Iron (set up by the RTZ group and Kaiser Steel of the U.S.) is planning to increase its capacity to 38m. tons by 1975, while Mt. Newman Mining (comprising Australia's BHP group, Amax of the U.S. etc.) proposes to boost output to 36m. tons a year, of which 32m. tons will be exported. The

even more difficult. This applies whether planning for bulk steel production or the production of medium and highly alloyed steels. Whereas a few years ago the planner's choice for an integrated steelworks was a large blast furnace with sophisticated plant to provide a consistent burden and auxiliaries, such as hydrocarbon injection and oxygen-enrichment plant, to ensure high and economic production rates, the planner of 1971 must examine a number of new direct reduction processes for iron production.

Operational know-how on these new processes is now sufficiently extensive to make out a strong case for them to be chosen for an integrated plant of a capacity up to 5m. tons per year. Instead of coke ovens, blast furnaces, and L.D. converters, the plant would consist of kilns for producing iron by direct reduction of ore and large (say, 250-ton capacity) electric arc furnaces to convert the iron to steel.

One idea, recently examined both in the U.K. and Japan, is that of developing a combined nuclear power and steelmaking complex. It has been calculated that the integration of direct reduction and electric steel making with the process heat and electrical energy of a high-temperature, gas-cooled reactor would provide considerable economies.

Some development work would be required, but the potential rewards are great, particularly in view of the increasing costs of fossil fuels. For the U.K., where the production of nuclear power and steel are under national control, the administrative side of such a development should be relatively smooth.

Another avenue of change opened by the recent successes

New concern

In Brazil, the state-owned ore company, CVRD, plans to double its existing capacity of 20m. tons by 1975 and a new private concern, MBR, in which the U.S.'s Hanna Mining has a big stake, expects to be shipping 10m. tons a year by that year. Hanna is also involved in Canada's biggest ore producer, Iron Ore of Canada, which is planning to expand capacity to around 33m. tons, while its near neighbour, Quebec Cartier (a U.S. Steel Corporation subsidiary), is to raise its potential to at least 16m. and possibly 21m. tons.

The expansion of these eight companies alone, is estimated to total upwards of 120m. tons a year, and several other producers have plans to increase capacities running into several million tons. Many of the existing expansion programmes aim to have new capacity available by around the mid-1970s, and many existing producers have no doubt outlined their longer-term strategy. They can expect, however, to meet considerable competition from the number of ambitious projects at present on the horizon.

In Australia, for instance, the successful prospecting, partnership of Hancock and Wright has plans to enter the mining sphere in a big way and has linked up with people such as Texas Gulf Sulphur, Mt. Isa Mines and the Goldsworthy consortium to exploit huge deposits in the Pilbara. Arco Steel is hoping to mine some of the controversial Angela reserves, partly as a means of financing a big steel project in Australia at Jervis Bay.

U.S. Steel, which has big ore interests in Venezuela and Canada, is actively studying with Brazil's CVRD potentially huge deposits in the Amazon region, while the Venezuelan government is hoping to attract partners to exploit the big San Isidro deposits. In Africa, the South Africans are trying to break into the ore trade in a big way with large-scale export proposals, and there are potential developments in a number of other countries, including the Ivory Coast, where Pickands Mather is studying a mine project. Liberia, which has become

an important exporter as a result of U.S., Swedish and German participation, is also anxious to expand exports.

India is richly endowed with iron ore resources and has substantial outlets in Japanese and East European markets. The American Marcona Corporation is currently engaged in investigating reserves at Kudremukh in southern India, for example. India is, however, handicapped by inadequate ports and is bedevilled by poor rail facilities and its competitiveness will be affected until these are radically improved.

The Soviet Union which is the world's biggest ore producer, also has vast reserves, and its mines provide ore for its own large steel industry as well as the bulk of the needs of East European countries and other Western European countries. There are plans to step up shipments to the West, including a large-scale pellet plant, in which U.K. participation has been invited. Given the will, Russia could become a more important source both to Europe as well as Japan (from Siberian ore fields) in the future, although the need to improve the quality of much of the ore it supplies to its own steelworks might possibly delay export plans.

Prime products

The majority of the plans mentioned above envisage producing ore to today's market requirements, that is, from lump

ore, fines, etc., to pellets. The growing sophistication of the modern blast furnace has meant that it demands prime ore products, and the days of shipping run-of-mine material are probably nearing their end. The last decade has seen an amazing growth in pellet consumption, and current world capacity of 150m. tons is scheduled to reach 200m. tons by 1977.

New technologies could, in fact, have an even bigger impact on the ore trade in the 1970s. There is, for instance, a widespread belief that pre-reduced ore (containing 85-95 per cent iron) will make a significant breakthrough. This development would also have far-reaching implications for the steel industry because pre-reduced material can be fed directly into electric steel furnaces, thus avoiding the conventional blast furnace. Already, the use of pre-reduced ore has allowed the launching of a number of small-scale steel plants—often called mini-mills—in various parts of the world.

A leading authority on the ore market has pointed out that if world iron ore demand reaches 1,000m. tons by 1980 the industry will have to undertake commitments for providing new capacity involving unprecedented capital expenditure, possibly of the order of \$10,000m. It is clear, therefore, that the next decade represents a tremendous challenge to the ore industry. World ore needs will have to be evaluated and the enormous resources found to meet them.

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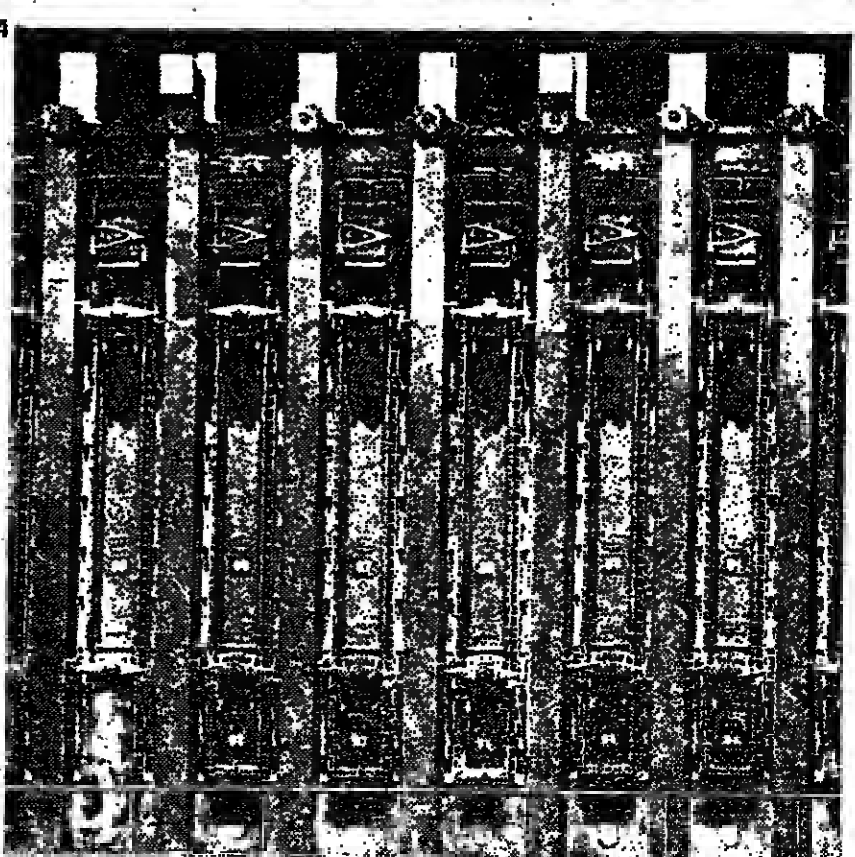
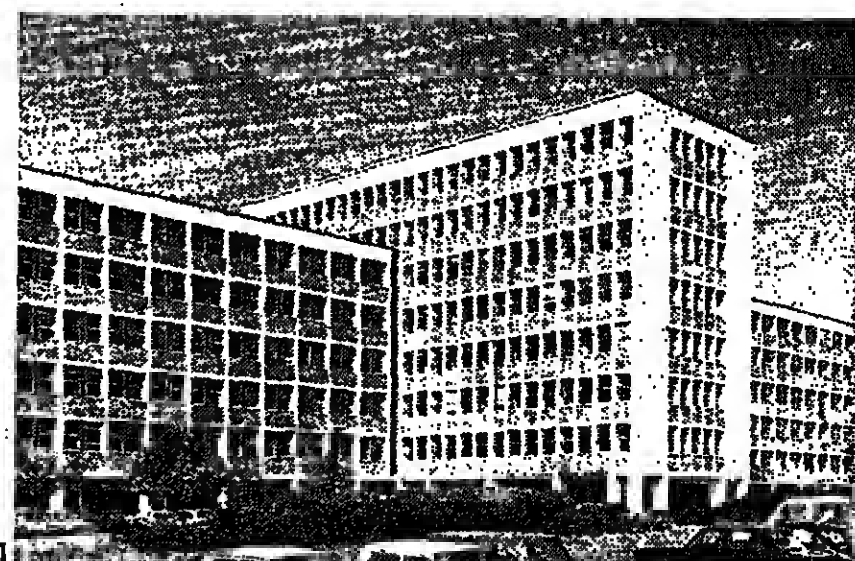
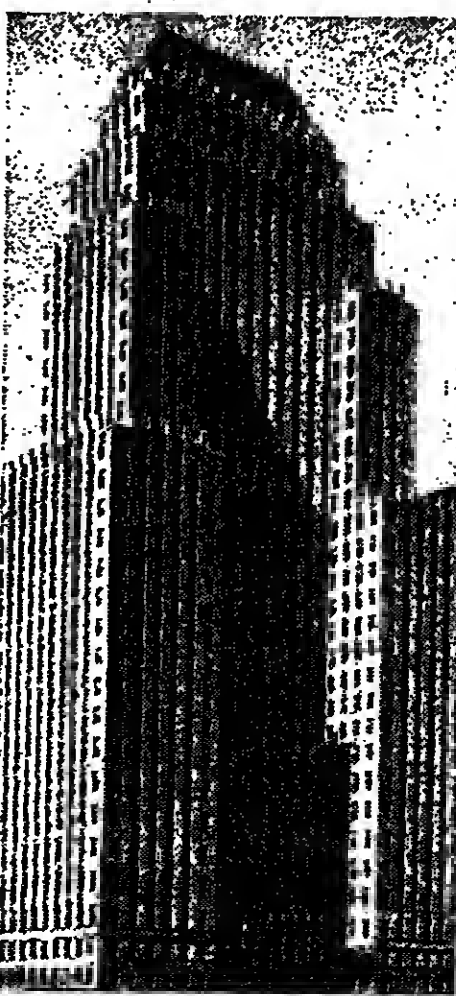
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WORLDWIDE PROCESS ENGINEERING AND CONSTRUCTION



Rapid advances in new technology

By CHARLES W. J. CRAWFORD, Technical Editor, Steel Times

For the world of steel, the second half of the 20th century has, to date, been one of extraordinary technological change roughly comparable to the period of revolutionary change in steelmaking which followed the commercial development of two outstanding inventions—the Bessemer and the Siemens-Martin processes—in the second half of the 19th century.

Foremost among the current new technologies stands the LD converter steelmaking process, introduced in the early 1950s and already accounting for about half the world's steel production. Other revolutionary technologies since 1950 include the continuous casting process, various vacuum treatment processes, the vacuum arc remelting and the electro-flux refining processes, the injection of hydrocarbons in the tucere zone of the blast furnace, automatic gauge control, the integrated automatic forge, high-speed turning processes, and, of course, the ubiquitous computer for the control of various processes.

This atmosphere of change, although gratifying to the technologist and a serious embarrassment to the planner and investor, is, fortunately, a blessing to the industry. There is no doubt that steel today is cheaper and of higher quality than it would have been without the application of these innovations.

Stable period

What, then, is the present outlook in steel technology? Is steel entering a relatively stable period like that which followed the introduction of open-hearth and the Bessemer processes? Certainly not, for a quick look at the various "innovations around the corner" shows that the task of today's planner is

even more difficult. This applies whether planning for bulk steel production or the production of medium and highly alloyed steels.

Whereas a few years ago the planner's choice for an integrated steelworks was a large blast furnace with sophisticated plant to provide a consistent burden and auxiliaries, such as hydrocarbon injection and oxygen-enrichment plant, to ensure high and economic production rates, the planner of 1971 must examine a number of new direct reduction processes for iron production.

Operational know-how on these new processes is now sufficiently extensive to make out a strong case for them to be chosen for an integrated plant of a capacity up to 5m. tons per year. Instead of coke ovens, blast furnaces, and L.D. converters, the plant would consist of kilns for producing iron by direct reduction of ore and large (say, 250-ton capacity) electric arc furnaces to convert the iron to steel.

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Some development work would be required, but the potential rewards are great, particularly in view of the increasing costs of fossil fuels. For the U.K., where the production of nuclear power and steel are under national control, the administrative side of such a development should be relatively smooth.

Another avenue of change opened by the recent successes

Powder metallurgy

Another revolutionary development lurking around the corner is that of the application of powder metallurgy methods to bulk steel production. The manufacture of many engineering components from an iron powder base is already commercially viable, and the potential advantages of applying this route to the manufacture of other steel products, such as steel strip and forgings, has become more attractive and also more within the metallurgist's reach.

The production of high-quality steel strip from iron powder is already technically feasible, and it is only a matter of time before further reductions in the cost of iron powder and in its subsequent processing make it the preferred route.

Likewise, the manufacture of forgings from compacted powder preforms is now receiving serious attention because it offers economies in the forging operation and greater consistency of material composition and structure than that obtained

Continued on next page.

WORLD STEEL XII

BSC investment in the balance

By HAROLD BOLTER, Industrial Correspondent

Lord Melchett, the British Steel Corporation's chairman, has just decided to detach himself from responsibility for the day-to-day operation of the world's third largest steelmaker and concentrate on forward planning and policy. Faced, as he could be, with all the problems involved in a planned investment of up to £4,000m. over the next decade, the decision appears a wise one.

A decision on BSC's longer term investment is expected from the Government some time during the next two months, as part of the second phase of its deep-seated review of the nationalised steel industry.

BSC's basic case for carrying out the huge investment which it is now trying to persuade the Government to accept is that expenditure on this scale has been forced upon it by its legacy from the past.

Before nationalisation, it has been argued, investment was grossly inadequate for several years. This year, for instance, the nationalised steel concern will spend nearly £260m. on modernisation and development at current prices. In 1966, the private steel companies now acquired by BSC, spent some £70m. at 1971 prices.

A visit to a few of the

Corporation's older works is sufficient to make the point that it inherited a great deal of obsolete plant. There is evidence, too, that much of the equipment it took over had not been maintained adequately, giving rise to high maintenance costs as well as high operating costs over the four years which have elapsed since re-nationalisation. In turn, this has led to low productivity.

The BSC has pointed out to the Government, too, that among the assets it inherited were four plants which had come into production from 1962 onwards where the effective capacities were much below the potential of some of their major constituent units.

Fixed assets

It has complained that, by the end of 1967, when they were acquired, these four plants had together made losses of £130m. and none had become profitable. Nevertheless, the Corporation was obliged to assume debt obligations of £233m. in respect of these non-profit-earning assets. Overall, there is a substantial amount of fixed assets included in the BSC balance-sheets which cannot be made to earn an adequate return on the book value.

In this situation, large-scale

of scale which could be obtained from larger units should enable prices to be charged which would help secure a much larger export market for BSC products.

The £4,000m. which BSC is seeking to spend is made up of £3,000m. for fixed investment in the U.K., £450m. for investment overseas, largely in iron ore and coking coal projects, and £250m. additional working capital. Some of these costs are inter-dependent.

The biggest single cost would be incurred in the construction of a major new works with an ultimate annual capacity of up to about 15m. tons of crude steel on a "green field" site yet to be chosen. Expenditure here would be of the order of £1,500m.

Through computer studies BSC has narrowed the choice of a site for this project down to two, it is believed. One fulfils all the economic requirements of building a works of this scale near to deep water facilities, which would enable giant ore carriers to berth and be near the potential markets at home and overseas, which suggests a South Coast site. The other finds favour only when social considerations are taken

into account, which points inevitably to a possible site in Scotland.

At the moment BSC is unwilling to reveal these possible sites and, in any case, the whole exercise seems likely to prove somewhat academic. Present indications are that the proposal for a "green field" site development will be left on the table when the Government pronounces on BSC's plans.

The Corporation should have more success with its proposal for a "brown field" development, built near an existing plant and sharing some of its facilities.

Under this plan BSC would build a plant of at least 8m. tons annual ingot capacity, probably at Redcar in Yorkshire, which could be stretched later by a further 2m. tons. This involves a potential expenditure of £800m. With the 4m. tons already being produced at the BSC's Lakenby works next door, the combined operation would have an initial capacity of 10m. tons and a potential output, with further expansion, of 12m. tons.

Additionally, if the "green field" project is left in abey-

ance, it is possible that the Government might support another "brown field" development, building on existing modern resources, elsewhere in the U.K.

The £450m. which BSC would like to set aside for investment overseas is a clear enough indication that it has no intention of investing in a "green field" project overseas. Such a scheme would entail the expenditure of at least £1,000m.

Coal imports

Most of the £450m. would be spent on securing long-term sources of supply for coking coal and iron ore. The BSC has complained long and somewhat bitterly over a period of several years that Government restrictions on coal imports have enabled other steel producing countries, notably Japan, to sew up the most attractive sources.

With the Government's decision to allow imports of coking coal on open general licence from December 7 last year the Corporation began to bring in comparatively small quantities of foreign coking coal to supplement low-volatile coal supplies from the National Coal Board.

Inevitably, however, BSC's requirement for coking coal from abroad will depend on whether or not it is allowed to go ahead with its larger investment, particularly the "green field" project.

In the last few weeks Lord Melchett has been at some pains to point out that BSC has some major achievements to its credit, including a world leadership in electric arc steelmaking and special steels, the largest and most modern ore port in Europe at Port Talbot and hot and cold rolling facilities which are as good as any on the Continent.

Equally, he has accepted that great problems and difficult decisions lie ahead in modernising an industry which has its roots set in the 19th century.

His decision to concentrate full-time on the control of development and the initiatives of policy, the future planning of the Corporation's business and developments, its external relations at Governmental, national and international levels, and the provision and control of finance, financial policy and BSC administration and organisation was clearly necessary.

compared with mild steel (as is the case with Grade 30 BS 4360), but the B grade costs about 25 per cent. more than Grade 50. Experience shows that when all aspects of the use of weathering steels are considered, the initial costs of structures do not exceed those using steel requiring applied surface coatings, according to the BSC. And the subsequent savings in maintenance offered by these materials are a bonus that adds to their attractiveness.

Steel, of course, is the vital material in the thin-walled box girder bridges that have been in the news so much lately. To try and win the contract for the building of one particular bridge—the Humber Bridge—a consortium called British Bridge Builders has just been formed. Its members are the Construction Engineering Division of the BSC (formerly Dorman Long), Cleveland Bridge and Engineering Company and Sir William Arrol, Freeman Fox and Partners were recently confirmed as consulting engineers.

For a prestige project of this significance—the bridge will have the longest clear span in the world, over 1 kilometre in length—it is to be hoped that the construction will be carried out by British contractors.

In any event, certain recent events related to the erection of this type of bridge have shown the advisability of a single contractor being vested with sole overall responsibility. The above companies, under a different partnership, undertook the construction of the Forth Road Bridge and the Severn suspension bridges by target price contracts.

Looking now at cladding, another aspect of building in which large amounts of steel are used, the main development of recent years is coloured organic coated panels. Some 25,000 tons of this type of material was used last year, which may be compared with the 40,000 tons of galvanised corrugated sheet which are used mainly in the agricultural and temporary buildings sphere.

A number of proprietary brands of plastic-coated cladding systems exist, often comprising an integrated system of components including closures, cappings and flashings.

That steel cladding adds a certain degree of stiffness to buildings has been known for years, but it is only recently that this has been quantified and developed to the point of being a valuable aid in design. Work on stressed skin construction, as this subject is called, carried out at Salford University under the direction of Professor Bryan, has shown that savings of up to 25 per cent. in construction material weight are possible by taking the stiffening effect of the cladding into account.

Construction progress

By MARTIN ROUTH

—Estimates of the amount of steel used in the building and civil engineering industry vary; according to the Annual Statistics for 1970 published by the British Steel Corporation, the figure is just over 1m. tons; according to the Constructional Steel Research and Development Organisation, the quantity is 2.8m. tons, while the BSC Press office maintains the figure is "over 2½m. tons."

The figure presumably depends on what definition is applied to the construction industry, but accepting that it is more than 2½m. tons annually, the importance of technological improvement is considerable. However, because of the enormous capital costs of new steelworks and the time taken to get them working, major technical developments tend to be rather few and far between.

Steel products extensively used in the construction industry include rods and bars used in reinforced concrete and heavy rolled sections used in structural steelwork. The third main product is sheet steel cladding. In addition to these, quantities of tube, pipe and plate are also employed.

As far as reinforcement is concerned, one recent technical

innovation is GKN's TorBar—a high-yield deformed bar produced by cold twisting a specially designed hot-rolled mild-steel bar. Theoretical calculation has shown that 30 per cent. savings in steel are possible for the same stress level when this material is used instead of mild steel. And when account is taken of the reduced charges for transport, handling, cutting, bending and fixing, the direct savings in steel cost can become significant.

High strength

The lack of contact between transverse and longitudinal ribs eliminates harmful stress raisers, and the high bond strength is achieved by the combination of helical longitudinal ribs and transverse ribs. The bar qualifies as having high bond strength under the conditions of the building code CP 114 and the draft of the new unified building code.

Despite being a cold-worked bar, it can be welded and full strength butt welds are possible. Bend and reverse bend tests have been satisfactorily carried out at temperatures as low as minus 30 degrees Centigrade.

As the high yield characteris-

tics of steel are achieved either by altering the chemistry of the metal before rolling or by cold-working it after rolling, GKN (South Wales)—part of GKN Rolled and Bright Steel—having no control over the steelmaking, had to install automatic cold-working machinery in order to produce Torbar in any great quantity. That the market for high-yield bars is expected to grow is evident from the fact that GKN invested about £500,000 in plant geared solely to the production of this material.

Stainless steel "Stalfix" bar, produced by George Clark (Sheffield), is another recent development in the field of reinforcement. This material—made from billet supplied by the BSC's Stockbridge Works—has been used in precast panels used on tower blocks and maisonettes built for Manchester Corporation and as reinforcement at Kidbrooke, south-east London, for the GLC, among other things.

Its high corrosion resistance, combined with high tensile strength, means that besides savings in reinforcement material, less concrete coverage is required.

One of the more significant

technical achievements on the structural steel side concerns the development of weldable, high-strength "weathering" steel. A product called Cor-Ten is made in this country by the U.S. Steel Corporation. With Corporation under licence from the U.S. Steel Corporation, the U.S. Steel Corporation has developed a yield strength considerably higher than that of mild steel, Cor-Ten also offers valuable weight savings.

The steel contains a total of about 1 to 2 per cent. of alloying elements, such as copper, chromium, nickel and phosphorus, and on exposure to air, forms a protective oxide coating. This means that conventional protection, like painting, is not required and consequently no maintenance costs are incurred.

Pleasing texture

From an architectural point of view, the material has a pleasing texture and the colour changes from brown to purple as time passes. Cor-Ten is available in two grades: A and B. The A grade can be used for all sorts of structural and machinery applications; but for construction bridgework the B grade is normally required.

Weight savings of the order of 30 per cent. are possible

Technology—(Cont'd)

Continued from previous page able by the conventional ingot-forging route.

In the field of special steels it is significant that a plant to produce 3,300 tons per year of high-speed tool steel by a new powder route (ASEA-STORA process) is currently being commissioned in Sweden. Is the relatively new electro-fusion refining process, which came to the fore as a producer of high-speed steels only five years ago, going to be superseded so soon?

In considering the more conventional liquid iron steel-

making route the planner will still have difficult choices to make. The question of blast-furnace capacity will loom large—should it be 5,000, 10,000, or 15,000 tons per day? Also, should the technique of injecting reducing gases into the bosh now under development in Japan be provided for in the design?

Although the L.D. process is currently a highly economic one, it would be folly to ignore developments in continuous steel-making such as the IRSID and spray steelmaking processes.

In planning an electric melting shop the adoption of the slanted electrode design, of scrap preheating, of continuous charging of fragmented scrap and/or reduced-iron pellets and of ultra-high power operation must all be debated. For the production of strip there is a growing likelihood that the successful continuous casting of relatively thin strip will eliminate much of the conventional rolling equipment. Assuredly, rapid technological development continues unabated, and the planner in steel must, more than ever, be on the alert to its influence on quality and investment and operating costs.

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Why Moscow is still talking to everyone

Moscow's reprisals against Britain are discussed by Michael Simmons, East European Correspondent, in their wider context of a sudden flurry of Soviet diplomatic initiatives

MOSCOW'S "official" airports, used almost exclusively by incoming and outgoing dignitaries and national leaders, have never been so busy as they are just now. To-day the most important visitor, who will doubtless be given the warmest possible of orchestrated welcomes, will be President Sadat of Egypt. Last night Mr. Alexei Kosygin, the Soviet Prime Minister, was returning from Morocco, completing a North African tour which also took in some very careful talking in Algeria. President Podgorny has just undertaken a trip that started in Delhi and Rangoon, and culminated in a five-day stay in North Vietnam, with which a new trade and aid agreement has been signed.

The unprecedented Soviet diplomatic offensive, in other words, is at its height, with only a slight disturbance having been caused by the expulsion of the Russians from Morocco, a main cause for satisfaction, as the dust settles, is likely to derive from the fact that Britain is now out of step with other Western countries when it comes to pursuing the dialogue of détente. The Russians' aims will remain unchanged.

Climax coming

The offensive will probably reach a climax to-day or tomorrow when Mr. Leonid Brezhnev, the Soviet leader, will be in his first visit to Western Europe since he took over the leadership at the end of 1964, and will constitute a landmark for personally as well as for the "special relationship" that the Russians, with rather more reservations, enthusiasm than the momentarily wary French, are seeking to forge between the two countries. President Pompidou, it can be expected, will do his best to get Mr. Brezhnev into a clearer

focus during his stay. He is anxious after all, not to be outbid by the West German Chancellor, Herr Brandt. The official programme, announced last week in Paris, indicates four sessions of formal talks between the two leaders in the five-day stay, and Moscow is insisting that this visit is "vivid testimony" of the mutual understanding and agreement prevailing between the two countries.

But Franco-Soviet relations, for all the warmly received effusiveness of M. Schumann, French Foreign Minister, when he was recently in Bulgaria, are not quite what they were in de Gaulle's day. Certainly there is talk in Paris of a possible de facto recognition of East Germany—at which the Russians would be cock-a-hoop. But there remains something enigmatic behind the Brezhnev trip to Paris. Quite what the Soviet leader hopes to achieve, beyond a much enhanced image for himself in certain places at home and abroad, is not easy to discern.

To some extent, this air of puzzlement pervades a number of the Soviet "troika's" trips—those just made as well as those in prospect. (Those still to come include Canada—possibly even the U.S.—later this month, and Denmark and Norway, in six or seven weeks' time.) In every capital on the Soviet leaders' itineraries, apart from Canada, there has been a growing, and active, interest in fostering relations with China. In positively every one, the awareness is as sharp as it is in Moscow that the Soviet diplomatic initiatives have come in a strangely sudden flurry following the traumatic—to the Kremlin, anyway—announcement from President Nixon that he was to go to Peking. For it should not be forgotten



The diplomatic round . . . Left: President Sadat of Egypt who arrives in Moscow to-day. Centre: Mr. Leonid Brezhnev, Soviet leader, who goes to France in two weeks time to meet President Pompidou (right).

French Prime Minister, M. Chaban-Delmas, has accepted an invitation to go to Peking. Thus, too, even while Mr. Kosygin was in Algiers, further touches were being put to a long-term trade agreement that the Algerians expect to sign soon with the Chinese.

Last Thursday, about four days after the departure of President Podgorny from Rangoon, the Burmese Government announced that Peking had agreed to the extension of its interest-free loans to Burma for another five years, formally giving new life to the bilateral economic and technical co-operation agreements signed in 1961.

The new Soviet agreement with North Vietnam was only signed after President Ton Duc Thang, at an official banquet for delegations to come out of Communist China. He will arrive in the knowledge that the

support from China as well as Russia. When Mr. Kosygin reaches Copenhagen and Oslo he will doubtless be intrigued to learn something of the commercially-oriented talks enjoyed in both places, only last week, by yet another Chinese trade delegation.

New impetus

Such activities on the part of the Chinese—even allowing for the fact that internal reactions in Peking might suddenly close the "open door"—are bound to disturb the Russians. But this disturbance reverberates even beyond the chosen itineraries of the Soviet leaders. Chinese aid to developing countries throughout the world, it has been estimated, came to nearly \$700m. last year, compared with less than \$300m. from the Soviet Union and \$185m. from the countries of Eastern Europe. Chinese terms, furthermore,

seem easier than those offered by the Russians, who tend more often than not to encourage projects more directly beneficial to the Soviet economy.

China's "open door" has therefore given a new impetus to a foreign policy which has hitherto largely been determined by the extent to which non-Communists have encroached on the well-being of the Communist movement in general and the Soviet Union in particular. It has also rather denied the Khrushchev concept of co-existence which was on the lines that Russians do not negotiate on a give-and-take basis, for the simple reason that they had nothing to give. You could not make concessions, according to Khrushchev, if you were not even bartering. Evidence that the Khrushchev concept is no longer valid—aside from the fact that line-toeing Soviet officials tend to wince when one mentions his

name—came with signing last month of the four-power agreement in Berlin. (This said, it is interesting to note that the Soviet Foreign Minister, Mr. Andrei Gromyko, is now reportedly concerned not to be left empty-handed by the Bundestag new that concessions have been made by Moscow.)

But the impetus to re-shape foreign policy has also come from other considerations. Moscow is still on the alert for all the Western technology it can get, and bilateral agreements to this end have been signed with increasing rapidity. Trade patterns, too, have changed as diplomatic activity has been stepped up. Mr. Nikolai Patolichev, Russia's very astute Minister for Foreign Trade, has gone on record—in the Government newspaper, *Izvestia*—saying that economic and trading relations were "important instruments" of Soviet foreign policy. A glance at the growth rates in turnover with West Germany, France, Egypt, and India—le name but four—confirms his thinking.

Equally significant, since Moscow extensively does not yet have time for what it calls the "closed economic grouping" of the Common Market, is the sudden growth in trade with Japan, as well as that likely to follow the agreement just signed with Canada, probably to be underlined when Mr. Kosygin gets to Ottawa.

Détente with the West, in other words, is one way of strengthening economic relations. The calls for a European Security Conference—not quite so confident since the row blew up with Britain—are being made by the Russians partly, as Mr. Patolichev has also indicated, to create "a favourable climate" for closer economic contacts between East and West. When asked precisely what the West would get out of such a conference and whether it were not in fact merely a means of consolidating the status quo in Europe to-day, Soviet spokesmen tend to lull one with words

about "the need for peace . . .". If, however, the West's eagerness to come to the conference table manifestly varies in Soviet eyes from country to country, and if these differences are underlined by Soviet favouritism this way or that, then, the aims of Soviet foreign policy are being well served.

Put another way, if the French State-owned Renault motor company agrees to Soviet terms for a plum contract to join in the huge lorry plant being built on the Kama River soon after the Brezhnev visit, while at the same time British trading and political relations with the Kremlin remain in a state of suspended animation, then the Russians will have good reason to be pleased with themselves. The KGB may have suffered a slight blow from the British rebuff, but the net result will be that Moscow will be able to exploit the differences that may emerge between Paris and London policy-makers—even as these policy-makers are preparing to sit down together at an EEC table in Brussels.

Hot and cold

Add in this the fact that Mr. Brezhnev, at his informal best, has just made friends with Herr Brandt, even though he, apparently remains quite capable of blowing hot and cold on the Ostpolitik, and the fact that neither the Americans, the British, nor the French are over-sure of what to make of this new friendship, and the Kremlin's foreign policy team have further reason for satisfaction. Their ultimate aim, as Communists, can only be served by such confusion. Small wonder, then, as they count their dividends, they feel able to discuss arms cuts with the Americans. But even as they sit down, the Russians must be increasingly aware of the very chilly draught at their backs.

Labour News

NCB answers pit pay claim tomorrow

BY OUR LABOUR REPORTER

THE £120M. WAGE CLAIM for Britain's 250,000 miners will be answered by the National Coal Board tomorrow. Mr. Derek Ezra, Chairman of the NCB, has already warned the union of "serious consequences" if the price of coal is pushed up faster than other fuels. He gave the warning the day after the National Union of Mineworkers' annual conference had approved the wage claim for increases of up to 45 per cent. The conference also voted to back the demands with industrial action if the NCB rejected them. The union has asked for a 25-week minimum for surface workers, an 28-week increase,

and £28 a week for underground workers, an extra £3 a week. It also wants adult rates to be paid from 18 instead of 21, and a minimum of £35 a week for those working under the National Power-Loading Agreement. Mr. Ezra, who succeeded Lord Robens as chairman, said in June that the miners must have a wage increase, but refused to be drawn then on what size of increase the industry could bear. But he said the prospects for the industry were much better than in the 1960s. Cheap and plentiful supplies of nuclear power had not materialised and the cost of bringing oil to Britain had increased.

Shopworkers to defy TUC on registration

BY ALEX HENDRY, LABOUR REPORTER

THE executive of the 329,000-member shopworkers' union decided yesterday to defy the TUC's policy of instructing members to take immediate steps to come off the new register of trade unions set up 11 days ago. The decision is in line with that of the general council of the General and Municipal Workers—the third highest union in the TUC—which will recommend to a special GMWU conference next month that no decision should be taken on registration before next year's annual conference in June. Mr. Alf Allen, general secretary of the Union of Shop Distributive and Allied Workers and a member of the TUC general council, is writing to the TUC to explain the decision of his executive and the problems facing USDAW if it tries to follow TUC policy. Like many other units, USDAW has a rule which says it must be registered. The registrar has yet to say if such rules prevent the unions coming off the new register by the unions' own legal advice is that they will.

The Association of Scientific, Technical and Managerial Staffs is another union with a "registration" rule. It has written to the Registrar asking to come off the register but is not proposing any rule change conference before next May.

Mr. Clive Jenkins, the general secretary, has sent a detailed document to the TUC explaining the difficulties that ASTMS would face if it were not registered. The document gives specific situations in named companies—mainly employing white-collar workers—where, what ASTMS calls "baggage" organisations could register under the provisions, exclude ASTMS from recognition and bargaining rights.

The first major union to change its rules so that it can come off the register is likely to be the engineers', with more than 1.5m. members. It is holding a special conference next month when the rule stating it will be a "registered trade union" is to be deleted from the rule book.

Yale study sees substantial benefits for U.K. in Europe

BY PAUL LEWIS

COMMON MARKET membership is likely to bring substantial benefits to the U.K. in trade with the Community, according to a study by Dr. Edwin Truman of Yale University and Dr. Stephen Resnick from New York City University. It is to be published shortly. The study is the principal conclusion of a new study on the trade effects of European integration which is being completed here on a novel basis by Dr. Edwin Truman of Yale University and Dr. Stephen Resnick from New York City University. It is to be published shortly. This is the principal conclusion of a new study on the trade effects of European integration which is being completed here on a novel basis by Dr. Edwin Truman of Yale University and Dr. Stephen Resnick from New York City University. It is to be published shortly.

Using their own econometric model based on bilateral flow of trade in Europe between 1953 and 1968, the authors have produced a new set of elasticities which, among other things, suggest that British exports are more price-sensitive than assumed in the White Paper. These have been used to forecast the likely impact of community membership under three different hypotheses about the position of the EFTA neutrals.

Assuming Austria and Sweden form a free trade area with the enlarged community but maintain their present external tariffs towards the rest of the world, the British non-food balance is expected to improve by \$425m. with exports rising by \$770m. and imports by \$345m. If the two neutrals only keep their EFTA trading privileges, the net improvement would be cut to \$275m., while if they lost all trading privileges—the end of the world—the figure shrinks further to \$330m. These figures still require correction to allow Switzerland's exclusion from the model because of incomplete data, a technical problem over Denmark, and, above all, the loss of Commonwealth preference to Britain. If this is done to the first set of figures, the British gain falls from \$425m. to \$185m. The assumptions here are a 5 per cent. export loss in Switzerland (minus \$16m.), another loss of \$50m. in Denmark, and a 5 per cent. deterioration in Commonwealth trade (minus \$170m.). Nevertheless, the U.K. retains a substantial net gain, and the least one can say, therefore, is that it would take a dramatic decline of at least 10 per cent. in exports to the Commonwealth to wipe out the short-term trade advantage of joining the Common Market.

Moreover, this picture is radically different from that painted by the Government in its 1970 White Paper which expected a net loss on non-food trade of between \$300m. and \$800m. This range must be cut in half to exclude the inflationary repercussions of the Community's farm policy and put it on a comparable footing with the Yale study. But the difference is still between a certain deficit and at least the likelihood of a reasonable surplus.

Both Whitehall and the Yale study are at one in regarding the overall balance of payments as the crucial factor in the Community's membership as inevitable because of the complexity of the common agricultural policy and the other community ventures. It is possible, however, that the Government would have been less vague about the cost of membership in this year's White Paper if it had not already published the pessimistic estimates for the non-food account which the Yale study now challenges.

According to this same report, British exports to the community as a whole are likely to rise 25 per cent. on a weighted average basis, while imports will climb by 15 per cent. The biggest market gain through membership will come in Germany (plus 35 per cent.), Belgium (plus 33 per cent.) and France (plus 25 per cent.), although imports from these countries will climb by 21 per cent., 17 per cent. and 19 per cent. respectively.

From a global point of view, a disturbing feature of the new study is that it forecasts a trade surplus of up to \$500m. from the rest of the world as a result of the community's enlargement. This must be added to the diver-

tive ideas regarding the country's medium as well as short-term economic problems. Preparation of the list of specific issues was decided in August, when Sir Frank described the purpose of the new NEDC initiative as "moving society into a situation in which the economy can enjoy sustainable growth and a mere stable currency." It was expected at that time that the "wise men's" list could include subjects such as the structure of pay settlements, problems of unemployment, the broad topic of economic growth, investment plans, and the problem of the low-paid worker. Also on the agenda to-day is the subject of international companies, which comes before the Council from time to time. The Permanent Secretary, Mr. Campbell, will discuss a paper prepared by the Department for the CBI, and Mr. Vic Feather, Trade and Industry. It is not TUC general secretary, are likely expected that a working party or committee to study the subject in topics, designed to lead to post-

Connecticut, Oct. 10.

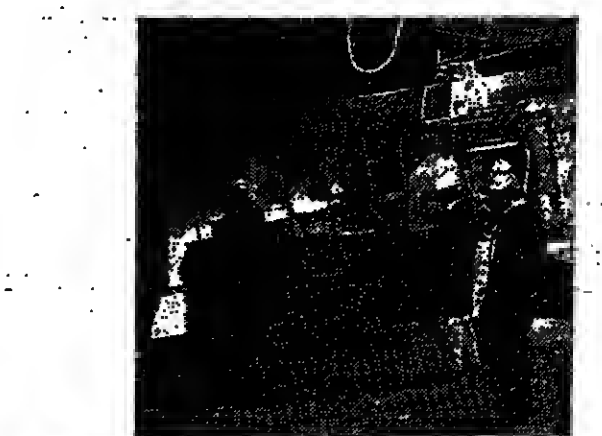
of nearly \$2,000m. which has already taken place through the Common Market's creation, and since a great deal of the loss is borne by the U.S., it gives some idea of the price Washington is paying for European unity.

Small builders' profits 'too low'

INVESTIGATIONS carried out by the National Federation of Building Trades Employers among members and non-members show that the profits of small building companies can be as much as 60 per cent. below what they should be. The reasons given by the federation include out-of-date estimating and tendering procedures, "abortive tendering," excessive "expenditure" on elaborate office systems and ineffective deployment of financial resources. As a result of the report, fresh moves are being made by the federation—through its management services unit, the Building Advisory Service—on the provision of a series of training courses for the principals and executives of small building companies, defined as those employing 25 or fewer.

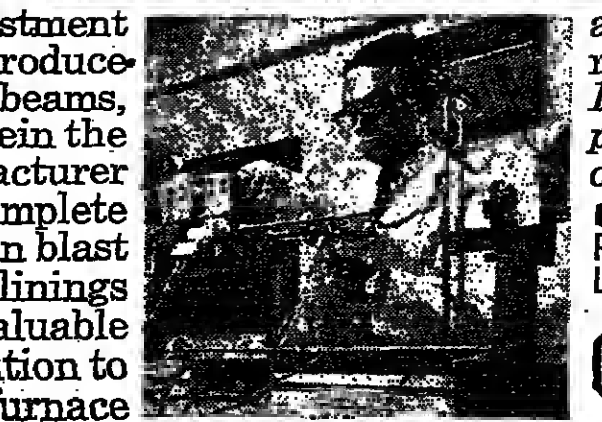
"The value of our inquiries and investigations is that they have pinpointed those areas in which loss and waste in all its forms occur in small building companies, both in the office and on the sites, and which erode profits at an alarming rate without anybody really being aware of it," said Mr. John Moss, director of BAS.

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Are furnace photo by courtesy of the British Steel Corporation.

EPTU executive move to lift ban on Communists

BY OUR LABOUR REPORTER

THE EXECUTIVE of the secretary, and Mr. Frank Chapple, the current general secretary of the union, is to recommend to a special conference later this month that the ban on Communists holding office should be lifted. The EPTU is the last major union with such a ban. The Transport and General Workers' Union, which has a similar rule, was a similar rule a few years ago. The union has also been advised that the rule could be illegal under the Industrial Relations Act, but says it was not prepared to change before the election. The difficulty was raised by its general legal advisers.

COMPANY NEWS+COMMENT

Brocks Group confident of growth

THE CHAIRMAN of the Brocks Group, Mr. B. R. Clark, looks confidently to further substantial growth and with this in mind the Board is considering the erection of an 80,000 square foot unit on the group's undeveloped land at Poole, Dorset. As reported on September 15 pre-tax profit for the year to June 30, 1971, was £523,027 (£305,274) with a dividend of 40 per cent. (equivalent 30 per cent.). A one-for-five scrip issue is proposed, and a takeover and profit of 40 per cent. is forecast for the current year on the increased capital.

Mr. Clark explains that as all production is now centred at Poole a greater degree of profitability has been achieved and the trend is expected to continue. The development programme is already beginning to show results and in production are several new items that will form the nucleus of future expansion—already exceeding expectations at this early stage.

He points out that the group is not just a retail alarm specialists but is electronics orientated with interests in leisure and security markets. This by no means implies any slowing down in the retail alarm business, and in fact, the group was well up on last year's and the Board is budgeting for further increases this year.

Meeting, Winchester House, E.C., November 2 at 11.30 a.m.

comment

Turning round Astor-Bird from loss to profit was evidently a significant factor in Brocks surpassing its £400,000 pre-tax profit forecast by such a wide margin, though precisely how "substantial" was A-B's contribution is not disclosed in the report. At the same time, the rest of the group went ahead strongly, showing turnover increases ranging from a fifth to a third, and this group looks set for continued growth in its various fields. The shares, now 17½, have come up from a low of 8½ this year so the prospect has not been overlooked, with a p/e of 18.8 on last year's earnings compared by a sub-normal ratio. This latter factor, however, may well persist with the benefit of A-B's past losses and if the forecast dividend increase of a fifth indicates similar profit expectations, the p/e becomes a more moderate 15.6.

Chester Barrie rationalisation

The Chester Barrie Group reports that unit sales for spring 1972 are running at 10 per cent.

HIGHLIGHTS

With the exception of Glaxo, whose results for the full year are awaited later to-day, the week ahead is concentrated mainly on interim statements with the retail sector prominent. Thus, to-morrow brings Marks and Spencer's half-time announcement and on Thursday that from British Home Stores, while mail order specialists Empire Stores should have an announcement to-day and Graffam Warehouses to-morrow. Among other retailabilities are Shipping Industrial Holdings and Brook Street Bureau, both due to-day, Babcock and Wilcox to-morrow and Austin Reed on Wednesday. The Discount market is well represented, with Gerrard and National Discount due to-morrow and both Jessel Toyne and Smith St. Anby on Wednesday.

above last spring, with some and export markets showing buoyancy. The group has recently carried out a review of manufacturing facilities at its six factories and as a result is to rationalise arrangements. Production of certain lines at Nicholson's (Coat Specialists) is to be transferred to other factories and will result in some local redundancy. In its second factory at Swindon will remain unaffected and will continue to make rain-wear and active leisure clothes, the demand for which is rising.

Elder Smith outlook brighter

GENERALLY, the outlook for increased earnings by Elder Smith's Colnbrook Mort is a little brighter, the directors state, but the problems of restraint will inevitably continue as a major problem. In their report, the full accounts for the year ended June 30, 1971, they say seasonal prospects are more favourable than last year, conditions being good over the major part of the continent. Provided normal follow-up spring rains are received in the main cropping areas, and in the event of a further increase in every reason to look forward to at least some improvement in livestock trading in 1971-72 year. This could be further assisted as the result of the price support scheme for wool, as announced in the Federal Budget and such effect it may, in turn, have on sheep prices. However, the proposed support price does not justify expectation of any significant rise in commission income from sheep sales.

H. Vincent growth prospects

WHILE conditions following the prolonged warm weather and the unusual after effects of climatic change have not yet returned to normal, present forecasts indicate that a further improvement in results of Harry Vincent can be expected, says chairman, Mr. S. T. Bridgewater. The development programme will continue though, as usual, the full benefits of the current year's programme will not be seen until next year, he adds. The decision to reduce purchase tax will enable the company to maintain a price for considerably longer period than would otherwise have been the case. "We therefore face the new financial year with confidence," the chairman declares. In preparation for entry into the EEC changes have been made to selling arrangements in Europe. September 27 group pre-tax profit for the year to June 26, 1971, was £106,239 (£24,174) and the dividend is restored to 12½ (4) per cent. Turnover increased by 15 per cent. to a record £2,318,000. The normal seasonal pattern of demand was considerably affected by the change in demand, but it is still too early to assess the full effects of devaluation but it is apparent that the currency changes and the intro-

duction of larger monetary units have had a marked effect on consumer purchases in the lower price categories, says Mr. Bridgewater. Overseas sales reached a record £388,000, an increase of 43 per cent. Substantial orders have been received from North America for shipment between December, 1971 and June, 1972. The value is in excess of £200,000, the largest ever received, and provides a good start to 1971-72. The chief company manufactures confectionery and "Blue Bird" toffee. Meeting, Halesowen, October 30, at 11.30 a.m.

Galliford Brindley expansion

THERE ARE substantial funds available to Galliford Brindley to finance further internal growth and for acquisitions, says chairman, Mr. P. Thompson. Currently, he reports, the specialist companies are enjoying the benefits of negotiated contracts. The building company has much industrial work on hand, and the civil engineering company is engaged in major works of urban reconstruction and main drainage. As reported on August 27 group pre-tax profit for the year to June 30, 1971 increased from £428,844 to £483,419, and the dividend is stepped up from 50 to 55 per cent. Turnover was slightly lower at £3,442,000 (£3,582,000). A breakdown of turnover and profit shows: 27,325,000 and £415,000; engineering £330,000 and £68,000; plant hire £543,000 and nil. Under the articles, on the day following payment of the final dividend this year, the Deferred Ordinary will convert to Ordinary shares. Bearing this in mind, the directors consider that the increase in the final dividend is justified. Mr. Thompson points out that the company has been ranked for dividend in this last year, 55 per cent. is covered more than two times by post-tax earnings. At June 30 the company had repaid £125,000 of short and medium term borrowings, and had no bank borrowings. Meeting, Rugby, November 3 at 12.30 p.m.

comment

Galliford Brindley achieved higher profits last year despite a 5 per cent. decline in turnover and a nil contribution from the plant hire



Assembling wing components for the Lockheed TriStar Airbus at the Belfast plant of Short Brothers and Harland. The work is part of a £4.75m. order for all-steel, spoilers and wing-tips placed by the Aero Corporation of Nashville, Tennessee, and is the first time that the American company placed such a contract outside the U.S.

which accounted for 7 per cent. of group turnover. The improvement in margins in a difficult year is noteworthy; much of G.B.'s success lies in its concentration on short-term contracts, averaging between nine-12 months, which avoid the worst effects of cost escalation. The group is well entrenched in the field of local authority work and looks well placed financially, so further progress seems in prospect. On last year's earnings, up from 4.6p to 6.0p per share, the p/e is 8.5 at 51p and some upward adjustment looks merited.

London Housing upturn

Reporting first half pre-tax profit up from £81,418 to £120,337, London Housing and Commercial Holdings directors state that the full year's results are expected to reflect "a satisfactory increase in profits". An unchanged interim dividend of 7 per cent. has already been announced. A total of 15 per cent. was paid for 13½ months to December 31, 1970, on a pre-tax profit of £168,704. Maintenance of the 15 per cent. payment has been forecast.

	1971	1970
Revenue	70,686	70,310
Operating income	21,459	13,327
Loan stock interest	22,514	22,514
Profit before tax	23,337	24,418
Taxation	(4,124)	(3,284)
Net profit	19,213	21,134

* Profits on sales of properties and investments.

London Co-op sales trend

Sales by the London Co-operative Society one of the country's largest, dropped in real terms in the six months to July 31 last compared with the corresponding period last year, its latest members' report discloses.

The report shows first half sales of £46.1m. or 6.6 per cent. up on the February-July 1970 figure of £43.23m., but well below the amount which would have been necessary to account for the rise in prices in the same period.

Within the total, food sales advanced by 6.9 per cent. to £23.55m., while dry goods sales were 4.2 per cent. better than 12 months earlier at £15.58m. The biggest rises came in hardware, 22.1 per cent. more than a year before, and television rental, with a 15.4 per cent. improvement. Bakery sales slumped by 4.1 per cent., while catering sales dropped by 20.1 per cent.

Economic Insurance

In his interim statement, Mr. J. A. MacDonachie, chairman of Economic Insurance Company, a member of the Furness Withy group, reports that marine and aviation premium income for the first half of 1971 has increased by 13 per cent., while claims settled show a 10 per cent. reduction.

There is clear indication that the improvement in more recent years is being maintained, and that the 1969 year of around 50 per cent. drop at the end of this year with a profit, he reports.

Fire and accident premium income still shows a substantial increase, but this should be contained to budget level by the year end. Home motor business has improved and the overall loss ratio is so far satisfactory, he states.

Jones Sewing Machine

RELAXATION of Government restrictions should have a beneficial effect on current year results of the Jones Sewing Machine Company states chairman Mr. B. J. Etzlin. Meanwhile, he reports, trading results for the quarter to June 30, 1971, show a 20 per cent. turnover improvement.

Part of this, however, is a result of price changes to absorb cost increases and the chairman feels it is as yet too early to forecast the likely result for the full year. Also the company is faced with the revaluation of the Japanese

ISSUE NEWS AND COMMENT

Derek Crouch offer at 80p per share

Lists open on Thursday, October 14, for the offer for sale by Hill Samuel and Co. of 1.65m. Ordinary 30p shares in Derek Crouch (Contractors) at 80p per share.

The business of the company is divided into two sections—open-cast mining, earth-moving and other civil engineering—as the major side, and building construction.

All the company's open-cast coal mining contracts, of which there are five outstanding at the moment, are undertaken for the National Coal Board. In view of the size of these contracts it is necessary for the company to operate very large drag line and bucket excavators and dump trucks. These include a Bucyrus Erie 1560W 65 cubic yard drag line excavator, which has been named "Big George", and 183 dump trucks which have a carrying capacity of 100 tons.

The building division developed slowly until 1964 when it undertook a major housing scheme at Washington, Co. Durham. Since 1966 the division has been awarded contracts for 88 system-built schools, totalling £11m., as well as building office blocks, factories and civic centres. The total value of all contracts outstanding at June, 1971, was £7m.

From a turnover up from £2.27m. in 1961 to £13.7m. in 1970, the profit of the open-cast mining side have risen from £135,000 to £208,000. On the building side turnover has advanced from £28,000 to £3.7m. over the same period but losses were incurred until 1967, although since that date profits have risen to £137,000.

At the current year ending December 31, 1971, pre-tax profits of the group are forecast at not less than £1.1m. A final dividend of 10 per cent. is intended, but a full year end on the basis of these profits dividends totalling 20 per cent. would be recommended. At the offer price the dividend yield would be 5 per cent. and the p/e 11.3.

Following the offer for sale the chairman and his family trusts will be interested in 57.5 per cent. of the equity while the Prudential Assurance Co. will hold 42.5 per cent. Brokers are Panmure Gordon and Co., and dealings are expected to start on Tuesday, October 19.

Prospectus Pages 30 and 31; See Lex

£5m. 7½% stock from Cardiff

Arrangements have been completed for the issue by the City of Cardiff of £5m. 7½ per cent. Redeemable stock, 1977, at £99½ per cent.

The stock is payable at £10 per cent. on application with calls of £25 per cent. each on November 9 and November 30 with the balance of £50 per cent. on January 6, 1972.

Interest is payable half-yearly with a first payment of £3,227½ per cent. on May 15, 1972. Running and gross redemption yields are 47.30 per cent. and 47.40 per cent. respectively.

Net proceeds of the issue will be used to replace monies temporarily borrowed, to replace maturing debt and to finance further capital expenditure. Brokers are and A. Springleur in London and Norman Harry and Co. in Cardiff. Lists open on Wednesday for dealings to start the following day.

comment

Like the Bristol loan last week the terms of the Cardiff issue look rather tightly pitched. Thus the stock is only yielding a couple of pence over GLC 7½ per cent., though there are usual £1 differential over comparable gilts—in this case Treasury 8½ per cent., 1977. The partly paid option of £10 for

nearly a month and the firm state of the corporation market at present should, however, ensure full subscription with a possible opening premium of between 1 and 1½.

Prospectus Page 7

Yule Catto re-quotation

Application has been made to the Stock Exchange for permission to deal in the 15.48m. Ordinary 10p shares of Yule Catto General Company, whose name will be changed, without a mission being granted, to Yule Catto and Co.

The company was formed from the merger of Malaysia General, a plantation group, with Yule Catto, an investment and industrial holding company. Dealings in Malaysia General were suspended on August 13 pending publication of full details of the enlarged group.

The plantation group owns a total of 18,574 acres of land in Johore, Malaysia; 12,083 acres are planted with rubber, 2,210 with oil palms while a further 418 acres are in process of being planted with oil palms.

Yule Catto has a portfolio of investments including stakes in Morgans Grenfell, Assam Consolidated Tea Estates and Andrew Yule and Co., as well as 2.5m. Ordinary shares in Malaysia General. Steps are being taken, however, to cancel these shares, reducing the issued share capital to £1.2m. Yule Catto also controls 79.4 per cent. of William Cox which is involved in the fabrication of thermoplastic materials to produce road lights, acoustic telephone booths etc.

The original Malaysia General group's profits after taxation have fluctuated between £60,000 and £253,000 over the last five years and are expected to fall from the latter figure to not less than £120,000 in the year to the end of October, 1971, as a result of a fall in the market price for rubber together with the ending of an advance in the price of rubber. After-tax profits of the YC group have risen from £52,000 in 1967 to £125,000 in the year to the end of June, 1971, including £40,000 in dividends from Malaysia.

The company intends to pay a final dividend of 4 per cent., bringing the annual total up to 12½ per cent. The directors consider that it is too early to make any estimate of profits or dividends for the year ending October 31, 1972. It is the Board's intention to continue the existing businesses of the group and to expand its industrial activities both in the U.K. and abroad, although no specific acquisitions are contemplated at present.

Brokers are Rowe and Pitman and George Henderson and Co. Dealings are expected to start next Friday, October 15.

comment

The new Yule Catto group is something of a hybrid at present with a falling rubber profits matched by the apparent growth potential in palm oil and the U.K. manufacturing interests. On the plantation side the hope is that the rubber price has now bottomed out and anyway palm oil profits ought to be able to make up some of the ground now on. In the U.K. the record of the thermoplastic fabrication side is solid enough and together with investment income this should reduce any fluctuations in overall profits. But in the absence of any forecast of future trends it is hard to see much market enthusiasm developing. The shares are expected to open just below the suspension level at around 20p where the p/e is 8½ per cent. and the historic p/e around 14 on consolidated 1970-71 profits and some 10 on the basis of the shares above.

Prospectus Page 33

THIS IS WHAT
PROPERTY BOND INVESTMENT
REALLY MEANS:
10.1% GROWTH
IN THE FIRST 10 MONTHS
ACHIEVED BY THE ROBERT SILK PROPERTY BOND

We launched less than a year ago without much fuss or ballyhoo. We prefer to act first and talk afterwards. And that is why we can now invite you to invest in Robert Silk Property Bond with 10 months of performance behind us. The general advantages of property bonds have been too well advertised by others for us to have to repeat them. The particular advantages of the Robert Silk Property Bond are quite another story, as you can see from the chart: the curve indicates the 10.1% growth in the price of The Robert Silk Property Bond since its launch at the end of October 1970. If we're climbing higher than many, it's perhaps because we have a certain natural advantage. Our investment is based on 25 years' down-to-earth property experience.

longer way to grow than most, which is why it could pay you handsomely to grow with us.

How you invest
Your investment, enclosed with the coupon below, is pooled with that of other investors and you are allocated units at the current market price. As with most other investments, these could fall in value as well as rise; however, your experience and our investment record indicate a very promising potential for the medium to long term.

There is no limit to the amount you can invest in this Robert Silk Property Bond, but it can be as little as £200.

Ease of cashing in
In order that you may cash all or part of your Bonds at any time, the Company maintains a 20% liquidity margin. Although in the interests of Bond holders generally, the Company reserves the right to defer payment in exceptional circumstances for up to six months, the 20% margin is considered more than sufficient to meet normal requirements. Upon encashment you will receive the full published price of your units less a small deduction which will not normally exceed 1½%—this price is net of capital gains tax and there is no "bid and offer" spread.

Guaranteed life assurance
Investment in The Robert Silk Property Bond brings automatic safeguards for your dependants. Your life becomes assured for 100% of your initial investment (100% if over 50) as soon as your application is accepted.

A 7% income-tax free income
If you invest £1000 or over you can obtain a 7% p.a. income from your bond by realising an appropriate number of units. If you wish to take advantage of this facility, please tick the box in the application form; the annual cashing of units and payments will then be made automatically. Capital growth should ensure that the remainder of your units at least maintain the value of your original investment. And although surplus liability may arise, that income will be entirely free of income tax.

Surplus advantages
If you are a surplus payer the full effects in respect of your Robert Silk Property Bond can be mitigated or in some cases eliminated entirely. Our office will be pleased to advise you personally.

This brings you on real property growth...
We're not suggesting you should put all your money in the Robert Silk Bond, but perhaps we've proved what a valuable part it can play in your portfolio. Why not come in now while we're still got a long way to go?

The Company's authority
Property, Equity & Life Assurance Co. Ltd., who issue the Robert Silk Property Bond, have been authorised by the Department of Trade & Industry under the provisions of the Insurance Companies Act 1963-1967. All contracts are issued subject to the controls and investment protection measures contained in the written authority given to the Company by the Department of Trade & Industry.

Management charges and unit valuation
There is an initial management charge equal to 5% of your investment; the balance service units in the Robert Silk Property Bond are valued by our independent Chartered Surveyors, plus the net rental income from these properties after after charges and the net interest from the short term securities held by the Fund. The deductions are made against income at the rate of 3½% and prospective capital gains at the rate of 1½% is then added against the Fund. The net asset value of the Fund has then been determined and the total result is divided by the number of units allocated to determine the net asset value per unit.

Report and accounts
Each holder will annually receive a copy of the Company Reports and Accounts, duly audited. This will contain full details of all the other assets of which you are part owner. Where the Report relates to properties you will find a certificate of the Company's independent valuers confirming the valuation quoted in the accounts. A schedule setting out the same full details is available for inspection at our Head Office.

No dealing with associates
There will be no property dealings by the Fund with any associate of the Company. In the Company's Memorandum of Association, the Company's Holding Company, the Company's subsidiary, or a body corporate controlled by any Officer of the Company.

Valuers
Druce & Company (Established 1822) of 64 Baker Street, London W1 value our properties when they are bought and at least annually thereafter.

Bankers
National Westminster Bank Limited, 125 Abchurch Lane, London EC4A 3DF, they will have in safe keeping all Deeds and Documents relating to properties and assets owned by the Fund.

The Robert Silk Property Bond
To: Property, Equity & Life Assurance Company Limited.
119 Crawford Street, London W1H 2AS. Telephone: 01-486 0857

I wish to invest in the Robert Silk Property Bond, for which I enclose a cheque payable to Property, Equity & Life Assurance Company Limited. I understand that the units will be allocated at the price current upon acceptance by the Company of my application.

☐ Please tick this box if you wish to take advantage of the 7% withdrawal plan.

☐ If you require details of our monthly or annual investment plans please tick this box.

NAME IN FULL _____
ADDRESS _____
OCCUPATION _____
DATE OF BIRTH _____
DATE _____

DECLARATION
I declare that I am in good health and do not engage in hazardous pursuits or fly other than as a fare paying passenger on a regular air route. I further declare that the foregoing statements are true and complete and shall form the basis of the proposed contract with the Company.

SIGNATURE _____
DATE _____

Who can offer you
3462 vehicles all over Britain?

Your GREEN VAN MANAGER can!

Your local B.R.S. Parcels manager is the man in your area with his own staff, his own drivers, his own vehicle fleet. But he can call on a whole lot more. He can put 3,462 vehicles, and 3,714 trailers at your disposal all over the country. A modern, supremely maintained fleet dedicated to the safe, speedy, reliable delivery of your goods, your parcels. Yes, we're a big organisation—but it's the local man you get to know.

AND A SPECIAL NOTE ON SPEED...
Main centres linked by direct rapid services (and we have 1,700 of them) normally permit 24/48 hours delivery. (Outside main centres add 1-2 days.)
Ask your local Manager for details of your direct connections.

BRS PARCELS LTD

FIXED

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BRS PARCELS LTD

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EUROBOND MARKET

Starvation in secondary market

By a Special Correspondent

STRAIGHT debt issues again featured the Eurobond market last week. Such has been the dearth of stock issues that investors are switching more and more to issues with coupons of between 7 per cent and 8 per cent.

Only a week ago the 81 and 9 per cent issues which attracted investment support gained several points to move up to a par-and-over price. The past week has seen the 81 per cent stocks also move up to these levels.

In general, every sector of the Eurobond market has been firm including U.S. convertibles, Japanese convertibles and straight Eurobonds. European Units of Account, European Currency Units and Black Issues have ranged up to 4 and 5 points in U.S. and Japanese convertibles and up to 31 points in other issues.

Many secondary market houses are having to raise the need for patience to their clients who are attempting to buy certain of the more popular bonds have been thwarted by the stock shortage.

In many respects it now appears as if the market is entering a strong bull phase although most secondary market dealers remember the ups and downs of the last three years are cautious in making optimistic forecasts.

The primary market has been noticeably quiet. Not one new public issue was announced during the week and yet the secondary market would have welcomed new, good quality issues. Speculation still centres upon a new \$500m. straight debt issue from an oil company, which would be a popular issue with investors and a DM100m. bond issue on behalf of a Mexican bank.

The prospects of lower interest rates is making the Eurobond market an increasingly attractive investment and the fact that both capital appreciation and attractive yields are fuelling demand.

In the current climate some secondary market houses believe first-class borrowers could obtain funds with relatively low coupon bonds—81 per cent and even 81 per cent are forecast as likely issues for forthcoming issues.

But the simple fact is that with

interest rates so patently declining and with more than a sufficient of dollar liquidity available, the big U.S. corporations are unwilling borrowers as are many European corporations.

In this sort of atmosphere the major issuing houses are playing the usual guessing game. They obviously want the most attractive rates for the borrowers still on their books and are attempting to guess the level to which interest rates will fall.

This does not help relieve the starvation in the secondary market which is caught on the one hand by unfilled client demand and on the other by the mere technicalities of market in which straight bonds are being increasingly withdrawn as the sinking funds operate.

After last week's general feeling of disorientation at the new CEDEL/Euroclear bridging negotiations had resulted in something far less than union, secondary market traders proved slightly more optimistic about the inter-system working agreement details of which were received from the Association of International Bond Dealers last Tuesday.

● **CIE GENERALE D'ELECTRICITE** profits before depreciation and tax in the half-year to June 30 rose to Fr.116.9m. (38.4m. in same 1970 period). Trading profit was Fr.37.7m. (36.2m.), while the remainder of Fr.79.2m. was capital gains. Net profits in the current year should be about Fr.68m. (59.9m. in 1970) while expected portfolio losses would be at least Fr.68m. (62m.), allowing the distribution of increased dividends in the group and a first dividend for Alstom, which joined the group recently.

● **VALLOUREC** said first half 1971 net profit dipped to Fr.13m. (Fr.25m.) gross earnings fell to Fr.57m. (Fr.53m.) despite a 2.3 per cent sales rise to Fr.1,070m. Deliveries of steel fell 3.5 per cent to 630,040 tons.

● **CIBA-GEIGY**, the Basle chemical company, is reported, as yet unofficially, to be planning a reorganisation of its entire photographic division, making this into a more autonomous sector of activities under the leadership of Alfred, the company's British subsidiary. The reorganisation would be, it is understood, effect Alfred himself, as well as Société Lumière, in La Chaux-de-Fonds, and parts of Grelat, of Regensdorf, Switzerland. Exploratory photochemical research will probably be attached to the parent company's main research unit in Basle.

IN BRIEF

Name of stock		High	Low	Close	Week's Change	Div.	Net
Altores Hornos do Vizcaya	94.5	92	94.5	+ 3.5	50.0	5.3	
Banco Central	375	368	375	+ 7.0	13.7	1.2	
Banco de Bilbao	385	375	385	+ 10.0	13.7	1.2	
Banco de Vizcaya	387	380	387	+ 7.0	14.2	1.7	
Banco Espanol Credito	736	726	736	+ 5.0	11.3	1.56	
Banco Exterior Espana	377	373	376	+ 4.0	5.00		
Banco Hispano Americano	767	763	764	+ 5.0	12.01	1.57	
Auxiliar Ferrocarriles	118	115	118	+ 0.5	7.02	5.93	
Cia Ind. Agricolas	280	275	280	+ 2.0	8.50	3.03	
Cia Esp. Petroleos	373	366	370	+ 10.0	2.75		
Dragados y Construcciones	126	126	126	+ 9.0	8.50	1.45	
Ebro Cia. Azu. Alcoholes	684	675(3)	684	+ 3.0	13.60	2.01	
Espanola Zioc	119	113	119	+ 18.0	5.10	4.38	
Fuerzas Elec. Catalunã	228	226	226	+ 0.5	10.00	4.27	
Galerias Preciados	314	314	314	+ 11.0	4.65		
Hidroelectrica Espanola	234	232	234	+ 3.0	10.00	4.27	
Iberduero	279	279	279	+ 1.0	10.00	3.58	
Union y Fenix Espanol	650	655	655	+ 6.0	12.00	1.81	
Min. Sid. Penarredã	185	182	182	+ 8.0	6.66	4.11	
SA. C. A. P. T.	170	170	170	+ 3.0	11.00	3.77	
Fin. Auto. Turismo Seatt	420	425	425	+ 3.0	15.00	3.50	
Asistores Espanoles	71	71	71	+ 4.25	5.98		
S. Met. Duro Felguera	65.5	65.5(4)	65.5	+ 3.0	5.00	7.24	
Snice	149.5	149.5	149.5	+ 8.00	5.35		
Unio. Expi. Rio Tinto	280	289	289	+ 10.0	3.93		
Simagro	843	839	843	+ 9.0	10.78	1.27	
Banco de Santander	843	839	843	+ 9.0	10.78	1.27	

Par values: Ptas 500 except * Ptas 100, Ptas 150, Ptas 1,000.

Source: Banco Central Madrid.

AUSTRALIAN WEEKLY LIST

Name of stock		High	Low	Close	Week's Change	Div.	Net
Advertiser Newspaper	11.55	11.55	11.55	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		

Source: Bank of Australia.

CONFERENCE ON INDUSTRY IN EEC

A one-day conference to help British industrialists meet the challenges of the Common Market will be held in London on November 4. Called by the British Association of Industrialists, the conference is sponsored by the Incorporated Society of Valuers and Auctioneers and will deal mainly with the setting up of manufacturing industries in EEC countries.

Mr. Tom Boardman, Conservative MP for S.W. Leicester and chairman of the party's Parliamentary Trade Committee, will be the opening speaker. Dr. Dietrich Stroh, President of the European Commission, will also speak.

The conference is part of a series of events to mark the opening of the Common Market on January 1, 1973.

£300,000 POOL FOR LONG EATON

An indoor swimming pool, estimated to cost about £300,000, is to be built at Long Eaton, near Nottingham. A council official said it was hoped work would start in the summer and be finished by 1975.

CANADIAN WEEKLY LIST

Name of stock		High	Low	Close	Week's Change	Div.	Net
Altores Hornos do Vizcaya	94.5	92	94.5	+ 3.5	50.0	5.3	
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Cia Esp. Petroleos	373	366	370	+ 10.0	2.75		
Dragados y Construcciones	126	126	126	+ 9.0	8.50	1.45	
Ebro Cia. Azu. Alcoholes	684	675(3)	684	+ 3.0	13.60	2.01	
Espanola Zioc	119	113	119	+ 18.0	5.10	4.38	
Fuerzas Elec. Catalunã	228	226	226	+ 0.5	10.00	4.27	
Galerias Preciados	314	314	314	+ 11.0	4.65		
Hidroelectrica Espanola	234	232	234	+ 3.0	10.00	4.27	
Iberduero	279	279	279	+ 1.0	10.00	3.58	
Union y Fenix Espanol	650	655	655	+ 6.0	12.00	1.81	
Min. Sid. Penarredã	185	182	182	+ 8.0	6.66	4.11	
SA. C. A. P. T.	170	170	170	+ 3.0	11.00	3.77	
Fin. Auto. Turismo Seatt	420	425	425	+ 3.0	15.00	3.50	
Asistores Espanoles	71	71	71	+ 4.25	5.98		
S. Met. Duro Felguera	65.5	65.5(4)	65.5	+ 3.0	5.00	7.24	
Snice	149.5	149.5	149.5	+ 8.00	5.35		
Unio. Expi. Rio Tinto	280	289	289	+ 10.0	3.93		
Simagro	843	839	843	+ 9.0	10.78	1.27	
Banco de Santander	843	839	843	+ 9.0	10.78	1.27	

Par values: Ptas 500 except * Ptas 100, Ptas 150, Ptas 1,000.

Source: Banco Central Madrid.

SINGAPORE

Name of stock		High	Low	Close	Week's Change	Div.	Net
Advertiser Newspaper	11.55	11.55	11.55	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		

Source: Bank of Australia.

CONFERENCE ON INDUSTRY IN EEC

A one-day conference to help British industrialists meet the challenges of the Common Market will be held in London on November 4. Called by the British Association of Industrialists, the conference is sponsored by the Incorporated Society of Valuers and Auctioneers and will deal mainly with the setting up of manufacturing industries in EEC countries.

Mr. Tom Boardman, Conservative MP for S.W. Leicester and chairman of the party's Parliamentary Trade Committee, will be the opening speaker. Dr. Dietrich Stroh, President of the European Commission, will also speak.

The conference is part of a series of events to mark the opening of the Common Market on January 1, 1973.

£300,000 POOL FOR LONG EATON

An indoor swimming pool, estimated to cost about £300,000, is to be built at Long Eaton, near Nottingham. A council official said it was hoped work would start in the summer and be finished by 1975.

INDICES

NEW YORK

Name of stock		High	Low	Close	Week's Change	Div.	Net
Advertiser Newspaper	11.55	11.55	11.55	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
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Source: Bank of Australia.

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STANDARD AND POORS U.S. STOCK INDICES

Name of stock		High	Low	Close	Week's Change	Div.	Net
Advertiser Newspaper	11.55	11.55	11.55	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
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AUSTRALIA

Name of stock		High	Low	Close	Week's Change	Div.	Net
Advertiser Newspaper	11.55	11.55	11.55	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
Amalgamated	10.69	10.69	10.69	+ 1.50	1.50		
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EUROPE

tion equipment maker, said pre-tax profit rose to Frs.22m. in first half this year from Frs.18.9m. in the same 1970 period.

● **FARBWERKE HOECHST** has officially opened a permanent office in Moscow. Mr. Willi Herkins, member of the company's board, said Hoechst was interested in developing further co-operation with the USSR

OFFSHORE AND OVERSEAS FUNDS (p**)**[illegible]

7	Ab.NL PGth Bds	111.5	113.0	----	—	price.	Estimated	to-day's
	Ab.NL PGth Bds	111.5	113.0	----	—	price.	to-day's	price

	Oct. 5	Oct. 6	Oct. 7	Oct. 8	Oct. 9	A. Year ago
Government Secs.	78.24	78.17	78.87	72.90	78.80	78.54
Foreign Govt. Bonds	78.79	78.79	78.85	79.00	79.10	78.44
Industrial Ordinary	490.8	492.6	418.1	418.5	408.9	406.8
Auto Mfgs.	47.3	47.8	47.1	47.0	45.0	45.0
Ord. Div. Yield per \$100	3.68	3.58	3.76	3.82	3.81	3.50
Securities Yield per \$100	3.69	3.57	3.68	3.68	3.56	3.04
P.R. Ratio (excl. P.R.)	17.57	17.64	17.06	17.00	16.78	16.08
Price Earnings Ratio	20.28	20.28	19.96	19.85	19.48	19.13

*10 m. 421.6 11 m. 421.3 Nov. 420.5 12 m. 420.5 13 m. 420.3

HIGHS AND LOWS	S.E. ACTIVITY
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[illegible]

Estimated price-earnings ratios and "times covered" are based on corporate earnings for 1970. * Assumed dividend and yield after pending scrip and/or rights issues. † Excluding refunds of U.S. Capital Gains Tax.

- 10. High and low marked that have been adjusted to allow for rights issues for new shares.
- 11. Interim (or quarterly) sales increased or decreased.
- 12. Interim (or quarterly) sales reduced, resumed or deferred.
- 13. Not comparable: net div. paid.
- 14. Interest or interest payable on a dividend.
- 15. Banks and insurance: reserve allocations.
- 16. Dividend cover: ratio of earnings to dividend cover.
- 17. Tax free: a figure based on gross profits or assets.
- 18. Dividend rate paid or payable on per cent of capital, cover based on dividend cover.
- 19. First year: assumed dividend and yield.
- 20. A dividend and yield based on the issue, a payment from capital source.
- 21. After local taxes on interest higher than the dividend.
- 22. Foreign cover: where otherwise indicated, a earnings based on pre-tax earnings.
- 23. Australian dividends and yield exclude a special payment.
- 24. Indicated dividend: cover based on interest available earnings.
- 25. Forecast dividend: cover based on previous year's earnings.
- 26. Yield: allow for currency change.
- 27. Dividend and yield based on merger.
- 28. Special payment: cover does not apply to special payment.
- 29. A net dividend and yield, a preference
- 30. A figure based on principal or other office.
- 31. A figure based on prospects or other.
- 32. A figure based on previous or other.
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A copy of this Offer for Sale, having attached thereto the documents specified below, has been delivered to the Registrar of Companies for registration. Application has been made to the Council of The Stock Exchange, London, for permission to deal in and for quotation for the whole of the issued Ordinary share capital of the Company.

The Ordinary shares now offered will rank for all dividends hereafter declared or paid on the Ordinary share capital of the Company.

The Application Lists for the Ordinary shares now offered will open at 10 a.m. on Thursday, 14th October, 1971, and will close on the same day. Copies of this Offer for Sale and Application Forms may be obtained from—

Hill Samuel & Co. Limited, 100 Wood Street, London, EC2P 2AJ
and Cleveland House, 19 St. James' Square, London, SW1P 4JQ.

and from branches of Barclays Bank Limited at 1 Aldermanbury Square, EC2V 7HT at Winchester House, Old Broad Street, London, EC2N 1HL, at 8 Angel Court, Throgmorton Street, London, EC2R 7HT and at 32-34 Church Street, Peterborough, PE1 1XE.

Derek Crouch (Contractors) Limited

(Incorporated under the Companies Act 1928)

Authorised
£2,000,000 in Ordinary shares of 20p each **£1,886,666**
Issued and fully paid

The Company and its subsidiaries have outstanding secured bank indebtedness which at 1st October, 1971 amounted to £1,397,000. Save as aforesaid and apart from inter-company transactions neither the Company nor any of its subsidiaries has outstanding any bank overdrafts or other short-term indebtedness, loan capital, mortgages, charges, hire purchase commitments or, except in the ordinary course of business, any material guarantees or other material contingent liabilities.

Hill Samuel & Co. Limited

Offer for Sale 1,850,000 Ordinary shares of 20p each at 80p per share

Payable in full on application

Directors

DEREK CHARLES HOWARD CROUCH, (Chairman and Joint Managing Director),
Newcroft, 367 Eastfield Road, Peterborough, PE1 4RD.
JDHN GRANT, (Joint Managing Director), Thirton House, Felton, Morpeth, Northumberland.
CHARLES ALLEN SANDERS, Lake View, 31 Tuckers Nook, Moxey, Peterborough, PE8 9EH.
JDHN LESLIE DUNN, Ty-Celyn, Broadway, Llanblethian, Cowbridge, Glamorgan.
HERBERT STANLEY LISTER, 3 High View, Wallsend, Northumberland.
REGINALD WILLIAM MARSHALL, Dek Lodge, 15 Park Avenue, Dunston,
Gateshead 11, Co. Durham, NE11 9QE.

Secretary and Registered Office

JAMES LESLIE ANNESS, Eye, Peterborough, PE8 7UW.

Bankers

BARCLAYS BANK LIMITED, 32-34 Church Street, Peterborough, PE1 1XE.

Receiving Bankers to the Offer for Sale

BARCLAYS BANK TRUST COMPANY LIMITED, New Issues Division,
P.O. Box 78, Malvern House, 72 Upper Thames Street, London, EC4P 4BJ.

Solicitors

To the Company: METCALFE, COPEMAN & PETTEFAR,
6 York Row, Wisbech, Cambridgeshire, PE13 1EP.
To the Offer for Sale: SLAUGHTER AND MAY, 35 Basinghall Street, London, EC2V 5DB.

Auditors

WHITING & PARTNERS, 12 & 13 The Crescent, Wisbech, Cambridgeshire, PE13 1EF.

Reporting Accountants

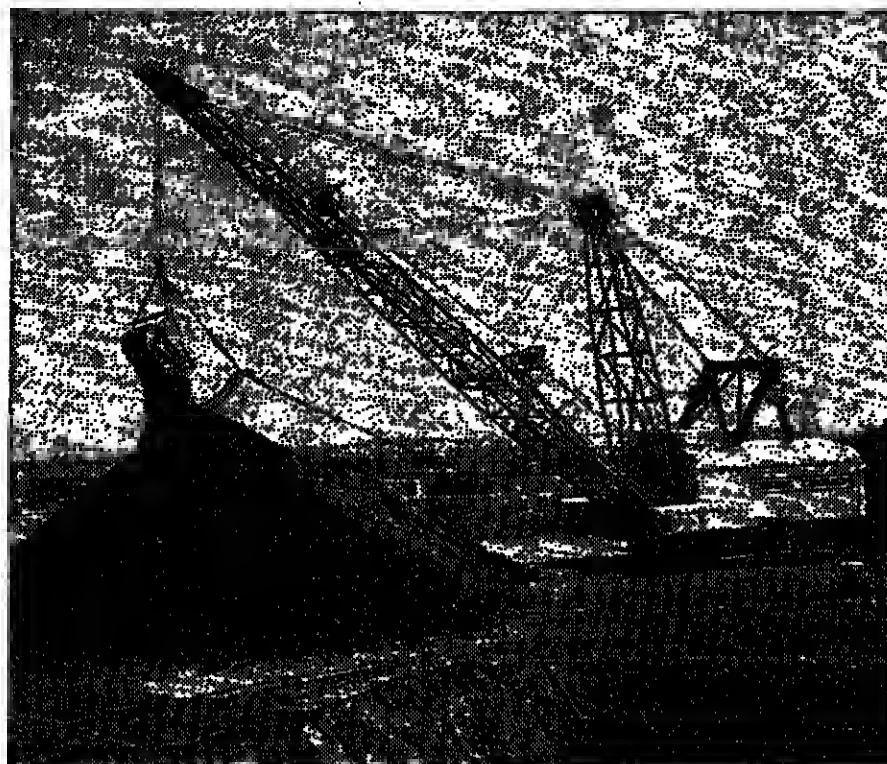
PRICE WATERHOUSE & CO., Chartered Accountants,
3 Frederick's Place, Old Jewry, London, EC2R 9DB.

Brokers

PANMURE GORDON & CO., 21 Austin Friars, London, EC2N 2ES and The Stock Exchange, London.

Registrar and Transfer Office

HILL SAMUEL & CO. LIMITED, 6 Greencoat Place, London, SW1P 1PL.



"Big Geordie" removing overburden at Radar North opencast coal site.

CHAIRMAN'S LETTER

The following is a copy of a letter to Hill Samuel & Co. Limited from Mr. D. C. H. Crouch, the Chairman of Derek Crouch (Contractors) Limited:—

The Directors,
HILL SAMUEL & CO. LIMITED
Gentlemen,

In connection with your Offer for Sale of 1,850,000 Ordinary shares of 20p each in Derek Crouch (Contractors) Limited ("the Company"), I have pleasure in giving you the following information:—

History and Business

The Company was incorporated in England on 27th November, 1942 to acquire the business of land drainage and agricultural contracting founded by me in 1938. The activities of the Company and its subsidiaries ("the Group") now comprise opencast mining, earth moving and other civil engineering (including equipment sales) and building construction.

Opencast Mining, Earthmoving and Other Civil Engineering
In 1945 the Company obtained a contract from the Ministry of Fuel and Power to work an opencast coal site in Northumberland. Subsequently, other opencast coal contracts were obtained in both Northumberland and Co. Durham. In 1957 the Company successfully tendered for a contract to mine 6.2 million tons of opencast coal at Radar North in Northumberland; this contract has since been extended several times and the contract area is now known as the Radar Zone. In 1964 the Company obtained its first contract in South Wales, at Abercava, and this contract has also been extended.

All the Company's coal mining contracts are undertaken for the National Coal Board ("NCB"). From time to time the Government authorises the NCB to operate a specified opencast mining site and contractors selected by the NCB are invited to tender for working the site. They are supplied with details of the proposed terms of the contract, including the monthly tonnage of coal to be extracted, and with mining surveys' reports which describe the geology of the site and give details of the expected quantities of coal and of overburden (the earth and rock covering the coal seams). The contractors quote in their tenders a price per ton of coal delivered to the NCB at a point specified in the contract. Contracts are often extended to enable areas adjacent to the original site to be worked. In these cases a new contract or a variation of the existing contract is usually negotiated with the contractor already on site, although occasionally the NCB will invite tenders from a number of contractors.

Under its contracts with the NCB the Company is subject to the General Conditions of Government Contracts for Building and Civil Engineering Works. Although the contracts cover work for between two and four years the NCB has the right to terminate a contract at any time; in that event the NCB is obliged to pay to the Company all amounts due for work undertaken to date of termination but no further compensation unless the NCB is satisfied that hardship exists. If the ratio of overburden to coal materially exceeds that specified in the contract, the Company may request a termination and the NCB may either accede to that request, in which case the Company must restore the site at its own cost, or agree that the Company continue work at an increased contract price to take account of the variation in the ratio; in the event of termination, compensation will be payable by the NCB if it is satisfied that hardship exists. The selling price under the contract is revised in accordance with a wages escalation clause and the most recent contracts also contain comprehensive materials escalation clauses. On completion of mining the site has to be restored by the Company and is normally made available for agricultural or forestry use.

The opencast sites now being worked by the Company for the NCB are:—

Date of original contract	Contractual tonnage of coal to be mined	Total contract sum	Percentage of coal remaining to be extracted as at 30th June, 1971	Estimated date of completion of present contract
	tons '000	£'000	%	
Northumberland				
Radar Zone	1957	11,817	28.848	6
Radcliffe	1971	2,300	9,089	100.0
South Wales				
Abercava	1964	2,236	7,737	14.9
Llanidli	1970	6,974	20,219	97.9
Tricastle	1971	97	503	100.0

Technological development in opencast mining techniques has taken place mainly outside the United Kingdom with the development of very large drag-line and bucket excavators and dump trucks. Such machines reduce the cost of opencast mining provided that they are used on long term contracts for large tonnages. The Company has obtained such contracts and owns and operates a Bucyrus Erie 1550W 85 cubic yard drag-line excavator, believed by the Directors to be the largest machine of its type in Western Europe, which was acquired at a cost of £2,295,000 and began operating in 1969. This machine, shown (in the photograph in your Offer for Sale) which has been named "Big Geordie" can lift approximately 100 tons in one bite and has a dumping capacity of 100 tons; its fifteen trucks cost in total £1,628,000. The Company also employs on sites now being worked four of the six 30 cubic yard drag-line excavators owned by the NCB. The Company's coal mining operations are planned on a twenty-four hour basis throughout a minimum of a five day week in order to obtain maximum benefit from the heavy earthmoving equipment.

In the year to 31st March, 1971 the Company produced about 1.7 million tons being over 20 per cent. of the total tonnage of opencast coal mined in the United Kingdom; this proportion has approximately trebled over the past ten years. With the benefit of existing major long-term contracts, proven competitiveness and estimated reserves of coal in areas adjacent to its present sites, the Directors consider the Company to be well placed to exploit an expansion in opencast mining or to withstand any reduction.

In the NCB Report and Accounts for the year to 31st March, 1971 issued on 2nd September, 1971, the NCB reported a profit, after charging interest, of £16.7 million on opencast coal production of 8.3 million tons and a loss, after charging interest, of £21.8 million on 13.3 million tons of deep mined coal production. The following statement was made in the NCB Report under the heading "Opencast Coal":—

"With the demand for coal exceeding total output practical measures were taken to increase the rate of opencast production, with the result that output from the 90ard's opencast sites in 1970-71 reached 7.9 million tons, 1.7 million tons and 27.7 per cent. more than in the previous year. In addition, production by private operators under licence from the 90ard, at 0.4 million tons in 1970-71, was slightly higher than in the previous year. Opencast production made a particularly important contribution to the supply of naturally smokeless fuels, providing 42.7 per cent. of the total supply of these domestic grades. In view of the high demand for coal and the need to rebuild stocks, the 90ard are planning to produce about ten million tons of opencast coal a year. Achievement of this output will

depend, however, on securing entry to new sites and on their authorisation by the Secretary of State for Trade and Industry under the Opencast Coal Act 1958. This means that there has to be a greater appreciation of the long term importance of the contribution of opencast production in meeting the country's energy needs.

Proposals for opencast working are sometimes opposed because of fears of its effect on the environment. Although there are inevitably some adverse effects during the working of the site, these are not permanent and the long-term effects are usually beneficial to the environment. The 90ard require their contractors to meet stringent conditions to protect amenity and once the coal has been worked the standards of restoration are excellent. About half of the new sites now being started will provide in due course land which is not merely restored to its former state but is improved considerably both in appearance and usefulness. In many cases Local Authorities welcome the working of sites in order to make a long-term contribution to the environment by clearing the waste and dereliction of earlier industrial activities. At the request of and in co-operation with the County Councils concerned two of the major sites started during the year will be restored as country parks. Plans for the creation of England's first seaside country park, based on an opencast site in Northumberland, are now under way. Opencast coal production provides a good opportunity for total resource planning which the 90ard believe should be encouraged."

The seaside country park referred to is being created by the Company on part of the Radar Zone site.

The Company also operates on behalf of the NCB two coal washing and screening plants at Dillwyn and Banwan in South Wales. These plants process coal from other opencast mines, as well as from the Company's sites, under a contract with the NCB which can be terminated by either side at three months' notice. The price per ton of coal received by the Company is subject to escalation clauses for wages and electricity.

In the earlier years the Company undertook large civil engineering contracts initially to redeploy machinery and employees engaged in opencast operations. Contracts at present being undertaken are of aggregate value £170,000 and range in duration from three months to two years. Excavators, tractors and general contractors' plant items are hired out for specific contracts from a depot at Eye; from time to time, plant surplus to requirements has also been hired out from the opencast coal sites in Northumberland.

A subsidiary, Derek Crouch (Sales) Limited ("Sales"), was set up with its headquarters in Peterborough in 1961 to sell building, civil engineering, mining and materials-handling equipment both to Group companies and to external customers. Sales, which has regional branches at Nottingham, Leeds, Colchester (Birmingham) and Newcastle, holds distributorships in certain regions for equipment of Ingersoll-Rand and Sambron and markets comparable equipment of other manufacturers.

Building Construction

This division of the Company developed slowly until in 1964 it undertook a major housing scheme at Washington, Co. Durham. In 1966 the division was formed into a limited company, Derek Crouch Construction Company Limited ("Construction"), with its headquarters at Girdley, Co. Durham. Since 1966, Construction has been awarded contracts for 99 system-built schools worth in total over £11,000,000 of which at 30th June, 1971, £2,423,000 remained to be completed. Construction also builds office blocks, factories and civic centres. The total value of all contracts being worked on at 30th June, 1971 was £7,000,000 of which £3,300,000 remained to be completed. In July, 1971 Construction obtained a contract for the building of the first phase of the Cumberland Infirmary at Carlisle worth £1,700,000 and has since obtained other contracts for £1,619,000. The majority of contracts are obtained on a selected tender basis from the government and local authorities and contracts are either of less than twelve months' duration or for periods of more than two years in which case they contain general escalation clauses.

Derek Crouch (Australia) Pty. Limited was formed in 1963 and has recently built two blocks of flats in Perth, Western Australia.

Management and Employees

I am 50 years old and am responsible for the overall direction of the Group's business. The day to day management of the business has been delegated to a number of senior executives. Mr. J. Grant, who is 48, has been a joint managing director of the Company since 1965 and has responsibility for the mining activities of the Group. Mr. Grant and I have entered into service agreements with the Company for the period until 31st December, 1976 (contracts (4) and (5) in your Offer for Sale). Mr. J. L. Dunn, who is aged 43, is responsible for the coal operations in South Wales and Mr. H. S. Lister, who is aged 49, is responsible for the operation and maintenance of the Group's mechanical plant. Mr. C. A. Sanders, who is aged 55, is the managing director of Sales and is in charge of operations at Peterborough. Mr. R. W. Marshall, aged 59, is the managing director of Construction; on his retirement from that position in 1972 he has agreed to act as a consultant for a further five years during the first two of which he will also be non-executive chairman (contract (1) in your Offer for Sale). All the above are full time executives and each has had at least seventeen years of service with the Group.

The Group now employs some 1,700 people of whom about 1,100 are employed on the mining operations and about 400 on building construction; labour relations are good.

Premises

The Company's head office building is situated at Eye near Peterborough on 10.7 acres of freehold land. It comprises office accommodation of 9,100 sq. ft. Adjacent to the offices are workshops of 31,390 sq. ft. used for the maintenance of machinery and for the storage of Sales' machinery. Construction occupies in Lintley freehold office premises of 12,300 sq. ft., and a freehold builder's yard of 33 acres. The opencast coal sites have on them various moveable offices, workshops and storage buildings.

Working Capital

The Group's purchases of machinery, amounting to £7,413,000 in the three and a half years to 30th June, 1971 (which qualified for investment grants of £2,922,000) have been financed entirely out of the Group's resources and the use of bank facilities. The Group's bank overdraft which at 1st October, 1971 amounted to £1,397,000 is expected to be substantially reduced over the next fifteen months after incurring capital expenditure on plant and machinery (net of sales) during that period estimated to amount to £1,500,000. The Directors are of the opinion that, taking into account bank facilities available, the Company and its subsidiaries have adequate working capital for their foreseeable requirements.

Profits, Prospects and Dividends

The growth in the Group's profits from opencast mining, earth moving and other civil engineering as shown by the Accountants' Report can be attributed mainly to the increase in the tonnage of coal mined in the ten years to 31st December, 1970 from 626,000 tons to 1,762,000 tons and to the technical ability of the Company, using modern and efficient machinery, to handle opencast mining contracts. The Company is subject to all the normal factors of operating an opencast mine; the profits can fluctuate as the result of variations in the quantities of coal and overburden and the type of overburden encountered as compared with estimates made at the time of tender. The trend of profits for opencast mining, earth moving and other civil

Application must be made on the accompanying Form of Application and be for a minimum of 200 Ordinary shares. Applications for up to 2,000 shares must be in multiples of 200 shares, for between 2,000 shares and 5,000 shares in multiples of 500 shares, for between 5,000 shares and 25,000 shares in multiples of 1,000 shares and for more than 25,000 shares in multiples of 5,000 shares. Each application must be accompanied by a separate cheque for the full amount payable on application and be forwarded to Barclays Bank Trust Company Limited, New Issues Division, P.O. Box 78, Malvern House, 72 Upper Thames Street, London, EC4P 4BJ. Cheques, which must be drawn on a bank in and be payable in England, Scotland or Wales, must be made payable to "Barclays Bank Trust Company Limited" and be crossed "Not Negotiable". All cheques are liable to be presented for payment on receipt.

Preferential consideration will be given to applications made by Group employees including Directors of the Company (other than Mr. D. C. H. Crouch and Mr. J. Grant) up to a maximum of 135,000 Ordinary shares if made on the special pink Forms of Application provided. Such applications must be made for 50 Ordinary shares or multiples thereof.

Acceptance of applications will be conditional upon the Council of The Stock Exchange, London granting on or before 20th October, 1971 permission to deal in and quotation for the whole of the issued Ordinary share capital of the Company. Money paid in respect of applications will be returned if such permission and quotation are not granted by that date and in the meantime will be retained by Barclays Bank Trust Company Limited in a separate account.

If any application is not accepted, the amount paid on application will be returned in full and, if any application is accepted for fewer Ordinary shares than the number applied for, a cheque for the balance of the amount paid on application will be returned, in each case through the post at the applicant's risk.

Arrangements have been made for the registration by the Company, free of stamp duty, of the Ordinary shares now being offered in the names of the persons entitled thereto under the terms of Letters of Acceptance which will be renounceable up to and including 10th December, 1971. Share certificates will be available on and after 7th January, 1972.

engineering has also been affected by losses incurred in 1961 to 1965, on large civil engineering contracts particularly for sewerage and flood prevention schemes; contracts for sewerage schemes are no longer undertaken. Construction has gradually gained experience particularly in system-built schools to enable it to obtain and to carry out profitable contracts.

Of the Group's turnover in 1970 of £6,832,000 (shown in the Accountants' Report) from opencast mining, earth moving and other civil engineering, 87 per cent. was attributable to opencast mining and the proportion of the relative profits attributable to opencast mining was about the same; in the current year this proportion is expected to increase.

As shown by the Accountants' Report Group profits before taxation for the six months ended 30th June, 1971 amounted to £665,000. During this period the factors mentioned above relating to opencast mining were favourable to the Company. The Directors expect that profits before taxation for the year ending 31st December, 1971 will be not less than £1,100,000.

The Directors are confident of the Group's prospects since its business now has the base of large NCB contracts with potential for extension. The Company is in a position to use its experience of large earthmoving contracts for expansion into related fields both in the United Kingdom and abroad.

The Directors intend to recommend a final dividend of 10 per cent. in respect of the year ending 31st December, 1971 for payment in March, 1972. In respect of the year ending 31st December, 1972, it is their intention to pay an interim dividend in September, 1972 and to recommend a final dividend for payment in or about March, 1973.

On the basis of profits before taxation of £1,100,000 and a corporation tax rate of 40 per cent., the Directors would have recommended in a full year dividends equivalent to 20 per cent. on the present issued share capital of £1,886,666. The appropriation of profits may therefore be shown as follows:—

Profits before taxation	£'000
Less: Corporation tax at 40 per cent.	1,100
	440
Profits available for shareholders	660
Less: Cost of dividend at 20 per cent. on issued share capital of £1,886,666	373
Retained profits	287

On this basis and at the offer price of 80p the Ordinary shares of the Company are being offered for sale at a price earnings ratio of 11.3 and on a dividend yield of 5.0 per cent.

Yours faithfully,
DEREK CROUCH
Chairman.

ACCOUNTANTS' REPORT

The following is a copy of a report which has been received from Whiting & Partners, the auditors of the Company, and Price Waterhouse & Co., the reporting accountants:—

12 & 13 The Crescent,
Wisbech, Cambridgeshire, PE13 1EF.
The Directors,
DEREK CROUCH (CONTRACTORS) LIMITED
HILL SAMUEL & CO. LIMITED
Gentlemen,

We have examined the books and accounts of Derek Crouch (Contractors) Limited ("the Company") and its subsidiaries (referred to collectively as "the Group") for the periods relevant to this report.

The turnover and profits before taxation of the Group for the ten years and six months ended 30th June, 1971 arrived at on the basis set out below, were as follows:—

Years ended 31st December	Opencast mining, earthmoving and other civil engineering (including equipment sales)		Building construction		Total	
	Turnover	Profits before taxation	Turnover	Profits before taxation	Turnover	Profits before taxation
1961	£'000	£'000	£'000	£'000	£'000	£'000
1962	2,242	113	581	(53)	2,847	82
1963	2,282	162	1,008	(8)	2,820	107
1964	4,230	177	1,833	(9)	3,861	114
1965	3,700	165	1,701	(62)	5,401	103
1966	4,118	452	2,732	(28)	6,850	424
1967	4,568	507	3,456	(53)	8,026	454
1968	4,544	981	4,034	76	8,578	739
1969	4,807	642	2,630	143	7,437	785
1970	6,832	808	3,701	137	10,533	945
Six months ended 30th June, 1971	3,143	608	2,479	57	5,622	665

Notes
1. The turnover of opencast mining operations represents sales after deducting, for certain contracts, amounts retained less amounts released by the National Coal Board ("NCB") in respect of restoration. Turnover of building construction represents construction work certified and in all other cases turnover represents sales to outside customers.

2. The profits (losses), including opencast mining results on the basis set out below, are stated before taxation and after charging all expenses of working and management and after making such adjustments as we consider appropriate.

3. The Company's opencast coal contracts have been for periods of between two and fourteen years. The working of an opencast coal site involves disproportionately high expenditure, (a) at the beginning of a contract in opening up the mine and (b) at the end of the contract in filling in the final area of excavation and restoring the land. The exceptional basis of the contractual tonnage of coal to be extracted. Provision is made and charged to costs over the period of the contract on the for restoration costs in excess of the amounts retained by the NCB (see Note 1); the provision includes a proportion of profit at the same rate as is anticipated for the contract as a whole. At the Llanidli site due to the particular geological conditions and the uneven distribution of previously worked coal seams over the contract area, certain restoration costs are being equalised over the three-year period which they take to complete and a proportion relating to old mine relating to opencast mining operations is accounted for in the year in which it arises.

4. Depreciation is charged on a reducing balance basis at rates calculated to write off the net cost of the assets over their estimated useful lives, with the exception that no depreciation is charged on the group's freehold office properties. The amount charged in arriving at the profits (losses) shown above is as follows: 1961 £228,000; 1962 £211,000; 1963 £282,000; 1964 £285,000; 1965 £308,000; 1966 £287,000; 1967 £298,000; 1968 £332,000; 1969 £453,000; 1970 £548,000; six months ended 30th June, 1971 £403,000.

5. The total settlements (including pension contributions) of the present directors of the company charged in arriving at the profit for the year ended 31st December, 1970 and six months ended 30th June, 1971 were £50,000 and £25,000 respectively. Under the arrangements now in force the remuneration would amount to £87,000 per annum.

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INTERIM STATEMENT

MIDLAND ELECTRIC
MANUFACTURING
COMPANY LIMITEDInterim Report
Half Year—30th June, 1971

The Board of Midland Electric Manufacturing Company Limited has declared an Interim Dividend at the rate of 4% less tax on the Ordinary share capital for the year ending 31st December, 1971 (last year 3.5%).

The company's Ordinary share register will be closed from the 15th day of October, 1971 to the 30th day of October, 1971, both dates inclusive, for the purposes of preparing warrants for the interim dividend, which will be posted on the 29th October, 1971.

The Chairman (Mr. W. J. Barber) states:—
"Figures for the first six months show the recovery in profitability which I forecast at the time of my statement in March. This progress is being maintained and in my view it should justify an increased final dividend for 1971. In anticipation of this an Interim Dividend of 4% is now declared."

A real expansion of our trading beyond the end of this year will, of course, depend upon an improving demand for our products and, at this point in time, the state of the country's economy makes such a prediction very difficult."

	Half year to 30th June, 1971 £	Half year to 30th June, 1970 £	Year to 31st Dec., 1970 £
UNAUDITED TRADING PROFIT of the Holding Company before taxation (See Consolidated Profit and Loss Account on page 40) (Estimated)	682,000	584,000	1,319,000
PROFIT AFTER TAXA- TION Less Dividend on 71% Cumulative Preference Shares for the period to the date of repayment	272,000	263,000	532,000
PROFIT ATTRIBUTABLE TO ORDINARY SHARE- HOLDERS	410,000	321,000	787,000
	—	2,400	2,400
	410,000	318,600	784,600

NOTE: The Unaudited Profits of the Subsidiary Companies have not been included in the above figures as they are not considered to be material.

The Union Discount Company
of London Limited
opens its new C.D. Dealing Room
today Monday 11th October, 1971

STERLING DOLLARS
E. Wright D. J. White
D. J. Lyons S. A. W. Long
Telephone Telephone
01-623 1918/20 01-626 8394/6
Telex 886431 and 887263

The Union Discount Company
of London Limited
39 Cornhill, London EC3V 3NU
Telephone 01-626 7941

Call to modify rural
bus service plans

BY ELSBETH GANGUIN

THE Passenger Vehicle Operators Association has asked the Government to modify its proposals regarding bus services in rural areas, which were published by the Ministry of Transport last July.

The basis of these proposals was that private cars and other small vehicles should be free to carry passengers for payment, that in certain circumstances, the licensing of bus services should cease, or be streamlined, and that excursion and tour services should be removed from all control.

In attempting to improve transport services in some rural areas, the Government was in danger of destroying the service at present provided in many other areas, in the association's view.

Protecting public

"It is to protect the public that we want the Government to modify its proposals. Certainly we favour the use of new types of service where this will benefit the public, but if there is no possible control of newcomers, the overall level of public transport can only decline," declares Mr. Denis Quin, director of the association.

If 5 per cent of the passengers using a service found alternative means of transport, the remaining 95 per cent would be in danger of losing their service. Many of these might not be able to find any other way of travel.

"To cater for this majority, central and local government would have to pay a substantial subsidy, which is not the solution the industry seeks. It is not realistic that the loss of even 15 regular passengers will result in a loss of revenue of the order of £1,000 a year."

The association calls for a specially appointed official in every county council charged with the duty of co-ordinating transport facilities. "He could assist in obtaining or varying licences as circumstances required, but they would remain under his control of the Traffic Commissioners."

Proper co-ordination of service could reduce the need for financial support from the Government to a minimum or eliminate it altogether.

If there were to be a free-for-all, local free enterprise bus and coach operators would be deprived "of the opportunity to help" while a modified licensing system was the only possible protection for fare paying passengers or tourists on excursions and tours. "We do not want to see the industry the sort of difficulties that have arisen during the summer for many people booking continental holidays and cruises."

Trivialities

Planning applications were being rejected on trivialities, on grounds not substantial within planning law and rarely with a feasible alternative suggested. With a rejected application the developer entered into a prolonged appeals procedure with determination likely some 12 months after the first refusal.

Major variations of procedure and certainly of philosophy were found even in adjoining authorities so that for the developer hand acquisition and town planning remained a perpetual guessing game.

"It is impossible to quantify on a national scale the additional cost of housing attributable to defects in our planning machinery but examples are to hand which demonstrate that on

specific projects 7 per cent of sales value can be directly apportioned to this cause," Mr. Sanderson claimed.

Given stability, the building industry could begin seriously to tackle the real problems of cost control with an efficiency impossible in the stuttering conditions of the last 20 years," he went on.

Standards in Government offices and local authority premises were generally adequate. In factory offices, standards varied, reflecting to some extent the conditions in factories, while some fuel storage premises were still sub-standard, states the report.

Steady progress had been made in raising standards in railway premises. Complaints, they concerned mainly temperature and ventilation. "There seemed less inclination to complain about a low standard of cleanliness, which is regarded by many

inspectors as among the contraventions most frequently found."

In many premises the standard of decoration was found to be poor, causing cleaning difficulties.

Lack of adequate heating was most often found in old premises, while overheating during the summer was mainly in modern buildings with large areas of glass.

Heat-producing office machinery was often installed in rooms without sufficient ventilation.

"Antique"

The need for the Holists and Lifts Regulations of 1968 was confirmed by the many defects found during inspections, and "a number of antique pieces of apparatus had come to light."

There were 18,871 reported accidents in premises covered by the Act, an 11 per cent drop against the same month last year. The report says that it is not clear why there has been a drop in accidents, and that it is too early to identify any long-term trend.

The Offices, Shops and Railway Premises Act, 1963, report for 1970, 20, 22p.

Several head-teachers have said they will call meetings of parents to collect ideas on colour and style. Meanwhile, Sheila Kemp, the union's textile consultant, is preparing a specification to lay before education authorities.

The union, based at Wallington in Surrey, is campaigning for a standard range of uniforms for all State schools. The range could then be sold in multiple stores all over the country.

Among letters of support from parents and teachers which have arrived at Wallington, one from a head-teacher says: "It is unnecessary and indefensible that schools should determine supplies. If the uniform is fairly standard and unflashy it should be perfectly possible for parents to shop around."

However, the "local monopoly" of school uniform suppliers is not the only target. The union also wants the standard range to be a colourful and stylish replacement for the shapeless hannel adhered to by many schools.

The site is by the side of the River Trent and near to the 51m. international rowing course and watersports centre being developed by Nottinghamshire County Council and other authorities.

After the sand and gravel has been extracted, the company intends to provide recreational facilities in the area to help make the watersports centre the most comprehensive of its kind in Britain.

The plans would include a site for competition sailing, a dinghy

hasin, an area for recreational sailing, a car park, a picnic area, and a wildlife reserve. There would also be an extensive tree planting scheme.

A spokesman for the company said it might be 15 years before the extraction work was finished but it was hoped the leisure project could begin to go ahead as the various stages of the extraction work were completed.

MUTUAL FINANCE
NAME CHANGED
Mercantile Credit has changed the name of its banking subsidiary, Mutual Finance, to Mercantile Credit Finance.

APPOINTMENTS

Lord Robens
joins Board
of AAH

Lord Robens, chairman of Vickers and Johnson Mithrey and Co. and former chairman of the National Coal Board, has been appointed to the Board of AAH, the fuel distribution, transport and engineering group which is joint owner, with the NCB, of the British Fuel Company.

Lord Robens has been a director of British Fuel Company since its formation in 1966.

Dr. B. H. Wormsley has joined the Board of HICK HARGREAVES AND CO. as commercial director. Hick Hargreaves is a subsidiary of Electrical and Industrial Securities.

A London antique dealer, Mr. Charles L. de Beumont, has been appointed chairman-elect of the INTERNATIONAL CONFEDERATION OF ANTIQUE DEALERS' ASSOCIATIONS. He will take over the chairmanship next summer.

Mr. John Paterson has been appointed chairman of SOUTHERN CABLESHIPYARD. Mr. Paterson, who joined the Board earlier this year, is also chairman of the Bifurcated Engineering Group, which has a minority interest in the company. He succeeds the late Mr. Frank King.

Mr. C. A. Davies succeeds Mr. King as managing director and will continue as secretary for the time being. Mr. Derek Redfern, previously general manager, has been appointed to the Board as works director.

Mr. Edward H. Curry, general manager of DRALLIM INDUSTRIES, has been appointed deputy managing director of the group's three operating subsidiaries, Drallim Controls, Drallim Tube Couplings and Cargo Aids.

Dr. David J. Saunders has joined the Board of RUPERT TAYLOR AND PARTNERS, noise control consultants, as research

director while retaining his post as lecturer at the University of Salford.

Mr. M. C. Purbrick, chief civil engineer, BRITISH RAIL, Scottish region, has been appointed chief civil engineer, London Midland region. He succeeds Mr. W. F. Beatty, who is retiring.

Mr. Eric R. Knox has been appointed an executive director of INDUSTRIAL MERGERS (Industrial and Commercial Finance Corporation). Mr. Michael Richardson and Mr. Nigel Olsen have been appointed managers of that company.

Mr. Roger Plant, who previously managed the investment and mergers department with Mr. Knox, will now head the ICFC quoted investments department.

Mr. S. G. Chadwick has been appointed managing director of PARK-REMAX. He was previously marketing director. The new marketing director is Mr. E. Clarke.

Mr. Laurence Viney has been appointed sales director of HAZELL WATSON AND VINEY (British Printing Corporation). He was previously sales director (periodicals) of Waterlow and Sons.

Mr. R. O. Gervard has been made chairman and joint managing director of FRAM GERRARD. Mr. H. E. Watkin becomes joint managing director.

Three members of staff have been promoted to the Board. They are: Mr. M. J. Foden (Marketing and Sales); Mr. F. L. Hunter (Construction); and Mr. S. J. C. McWilliam (Commercial).

Mr. David J. Mitchell, who was home counties area executive for Berrill Inns, has been appointed managing director of YOSHIDA TETLEY AND SON (Advised Breweries).

Work will start later this month on the scheme, which will cost more than £300,000 and will include a 15,000 square feet single-storey block with car parks and landscaping.

It has been designed by architects Gilling, Dodd and Partners, of Liverpool.

PLANNING PERMISSION has been granted for the development of a one-acre site for a computer centre on the Nether-ton industrial estate near Bottle, Lancs. The will house the centre for the Eight Banks Computer Group, which includes the Liverpool Trustee Savings Bank.

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The Bird Group
of Companies

Mr. W. T. Bird announces record pre-tax profits of over £300,000

Mr. W. T. Bird, the Group's Managing Director, reported that there had been a successful expansion of the Group's activities in the field of ferrous scrap processing for the year ended 30th April, 1971. This is strongly reflected in the Group's unaudited trading results.

The trading profit of the Group, consisting of the undermentioned companies, including the Group's proportion of profit of associated companies, is as follows:—

Trading Profit	£49,000
Depreciation	238,000
Profit before tax	£311,000

The overall increase in profit has been achieved in spite of difficult trading conditions and was contrary to the general trend in the scrap industry over the same period.

The large investment in scrap processing machinery and supporting plant and equipment is shown by the high charge for depreciation in accordance with the group's policy to provide for a substantial and continual replacement programme in heavy-duty areas.

The diversification over a wider range of operations centred on the handling of scrap had provided member companies with a firm basis on which to make further progress in the short-term, while the continued development of new and practical ways of dealing with scrap was designed to ensure a long-term growth in profits.

The Bird's Commercial Motors Limited, Birds (Morriston) Limited, Birds (Swansea) Limited, Birds (Wales) Plant Hire Limited, Birds (Birmingham) Road, Stratford-on-Avon, Warwick.

In an imperfect world we try to be different

At Victor Britain we take as much care over selecting our chauffeurs as we do in maintaining our luxury saloons and limousines.

For example, if you want to make a French client feel welcome, you'll get a chauffeur who speaks French.

If you get a Victor Britain car to go golfing, you'll also get a chauffeur who knows about golf and golfing.

Or if you just want to travel in dignity, you know you'll get treated with dignity.

A Victor Britain car is a luxury, but at least you know you're getting value for money.

VICTOR BRITAIN

01-262 3134

Bootle go-ahead
for new
computer centre

By Our Own Correspondent

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Office conditions show
steady improvement

BY ELSBETH GANGUIN

OVER the past few years, the annual reports on the working of the Offices, Shops and Railway Premises Act, 1963, have been reflecting a steady improvement in working conditions. While initially there were reports of insanitary, crowded, and dirty offices or shops, the 8m. employees in some 755,000 workplaces (one-third of the working population) covered by the Act, seem now much better cared for.

There were only 155 prosecutions last year (175 a year earlier), according to the latest annual report, for 1970, published to-day.

Standards in Government offices and local authority premises were generally adequate. In factory offices, standards varied, reflecting to some extent the conditions in factories, while some fuel storage premises were still sub-standard, states the report.

Steady progress had been made in raising standards in railway premises. Complaints, they concerned mainly temperature and ventilation. "There seemed less inclination to complain about a low standard of cleanliness, which is regarded by many

inspectors as among the contraventions most frequently found."

In many premises the standard of decoration was found to be poor, causing cleaning difficulties.

Lack of adequate heating was most often found in old premises, while overheating during the summer was mainly in modern buildings with large areas of glass.

Heat-producing office machinery was often installed in rooms without sufficient ventilation.

"Antique"

The need for the Holists and Lifts Regulations of 1968 was confirmed by the many defects found during inspections, and "a number of antique pieces of apparatus had come to light."

There were 18,871 reported accidents in premises covered by the Act, an 11 per cent drop against the same month last year. The report says that it is not clear why there has been a drop in accidents, and that it is too early to identify any long-term trend.

The Offices, Shops and Railway Premises Act, 1963, report for 1970, 20, 22p.

Several head-teachers have said they will call meetings of parents to collect ideas on colour and style. Meanwhile, Sheila Kemp, the union's textile consultant, is preparing a specification to lay before education authorities.

The union, based at Wallington in Surrey, is campaigning for a standard range of uniforms for all State schools. The range could then be sold in multiple stores all over the country.

Among letters of support from parents and teachers which have arrived at Wallington, one from a head-teacher says: "It is unnecessary and indefensible that schools should determine supplies. If the uniform is fairly standard and unflashy it should be perfectly possible for parents to shop around."

However, the "local monopoly" of school uniform suppliers is not the only target. The union also wants the standard range to be a colourful and stylish replacement for the shapeless hannel adhered to by many schools.

The site is by the side of the River Trent and near to the 51m. international rowing course and watersports centre being developed by Nottinghamshire County Council and other authorities.

After the sand and gravel has been extracted, the company intends to provide recreational facilities in the area to help make the watersports centre the most comprehensive of its kind in Britain.

The plans would include a site for competition sailing, a dinghy

hasin, an area for recreational sailing, a car park, a picnic area, and a wildlife reserve. There would also be an extensive tree planting scheme.

A spokesman for the company said it might be 15 years before the extraction work was finished but it was hoped the leisure project could begin to go ahead as the various stages of the extraction work were completed.

MUTUAL FINANCE
NAME CHANGED
Mercantile Credit has changed the name of its banking subsidiary, Mutual Finance, to Mercantile Credit Finance.

Work has started on a service-way to facilitate the mining of the area west of B4 sub-incline shaft between the 18th and 30th levels. The estimated cost of this service-way

is £243,000 and its main functions will be the banding of men and material into the area and the removal of development waste rock. Ore mined will be transferred to the B4 and B3 sub-incline shafts by means of footwall haulages on the 24th and 30th levels.

A certain amount of gold-bearing material has already been recovered from preliminary clean-up operations at the old gold plant. A small plant is to be erected to treat the product of the final clean-up. The new uranium plant is operating satisfactorily and the company is fortunate to have a participation in firm sales contracts at acceptable prices for the immediate years ahead.

Until our own production is sufficient to service these contracts in full the arrangements made to borrow uranium oxide on a replacement basis from another producer will continue.

In my statement last year I mentioned that due to the decrease in the quantity of water pumped from underground following the lowering of the water table, the mine's full requirements of industrial water could not be met from within its own area and were being augmented by a supply from the Rand Water Board. Negotiations are in progress with an adjoining mine whereby an additional supply of water will be made available at a point underground for use in our industrial system.

Although the mine property had been relatively free of ground movement during the year, a minor subsidence occurred in June last in the general vicinity and south east of No. 2 shaft. Four mine houses were evacuated and a portion of a mine road was closed as a precautionary measure. The behaviour of

in and for quotation for the issued share capital of Malaya General Company, Limited whose name will be changed, upon such permission and quotation being granted, to Yule Catto & Co. Limited.

Unincorporated under the Companies Act, 1902 to 1900.

This Advertisement is not an invitation to any person to subscribe for or purchase any shares nor is issued in compliance with the regulations of the Council of The Stock Exchange, London, for the purpose of giving information to the public with regard to the above-named company ("the Company"), and no obligation for the share capital of the Company has been undertaken by it.

The Offer was made by way of advertisement on 12th January, 1971 under publication of the terms of Offer to be made by the Company for the whole or the issued share capital of a private company presently called Yule, Catto & Co., Limited, but whose name will be changed to Yule Catto (Secretaries and Agents) Limited ("Y.C.A."). The Offers for Y.C.A. became unconditional on 12th January, 1971 and were subject to the application to the Council of The Stock Exchange, London, mentioned above being granted.

(i) that the above condition has been satisfied and that the Company has become a wholly owned subsidiary of the Company;

(ii) that the changes of name involved in the merger have become effective;

(iii) that the directors of the Company have given to reduce the capital of the Company from £1,632,000 to £1,408,986.99 by cancelling the 2,293,131 Ordinary shares held by Y.C.A. and thereafter increasing the capital to £1,932,000 by the creation of 2,293,131 Ordinary shares of 10p each.

The Directors of the Company collectively warrant that the above conditions have been fulfilled and that the cancellation of the shares referred to in (iii) would make any statement in this Advertisement misleading.

Issued and
fully paid
1,545,956*

Authorised
£1,632,000 in 16,320,000 Ordinary shares of 10p each

* Following the approval of the Court, referred to above, to the cancellation of 2,293,131 Ordinary shares in the Company at present held by Y.C., the issued share capital will be reduced to £1,316,642.90.

REGISTRARS

DIRECTORS
STEPHEN GORDON BARON CATT, of CAIRNCRAFT (Chairman), 91, William Mews, Lowndes Square, London, S.W.1. (Non-executive).
WILLIAM EWAN CATTO (Deputy Chairman), Bray Lawn, Fildes Road, Bray-on-Thames, Maidenhead, Berkshire.
PHILIP JOHN QUARLES BACK, The Dyke, Graemeadyke Road, Berkhamsted, Hertfordshire.
SIR HENRY BIRKMYTH, Bart., Springbank, Maple Avenue, Cooden, Bechill-on-Sea, Sussex. (Non-executive).
SIR DAVID DAVY ARNOLD, 10, Tavistock Square, London, W.C.1. (Non-executive).
SIR DENYS COLQUHOUN FLOWERDEW LOWSON, Bart., Brannidge Park, Belmont, Sussex. (Non-executive).
CYRIL HORACE FREDERICK PIERREFONT, The Gears, Pursers Lane, Peaslake, Guildford, Surrey. (Non-executive).
CHARLES FREDERICK MELVILLE RAWLINSON, The Old Forge, Arkedean, Saffron Walden, Essex. (Non-executive).
SIR GEORGE ALEXANDER STACLAN, St. Laurence, Biddeford, Kent. (Non-executive).
CHARLES IAN TURCAN, Oxey Barn, Woodside, Lymington, Hampshire.

YULE CATTO (SECRETARIES AND AGENTS) LIMITED, 72, London Wall, London, EC2M 5NH.

SOLICITORS

LINKLATERS & PAINES, Barrington House, 59/67, Gresham Street, London, EC2V 7JA.

AUDITORS AND REPORTING ACCOUNTANTS

WEST, WAKE, PRICE & CO., Chartered Accountants, 6, Broad Street Place, London, EC2M 7JT.

BANKERS

MERCANTILE BANK LIMITED, 15, Gracechurch Street, London, EC3V 0DU.

MORGAN GRENFELL & CO. LIMITED, 23, Great Winchester Street, London, EC2P 2AX.

BROKERS

WAVE & PITMAN, Woolgate House, Coleman Street, London, EC2C 5BL, and The Stock Exchange, London.

GEORGE HENDERSON & CO., 11, Old Jewry, London, EC2R 8DR and The Stock Exchange, London.

SECRETARY AND REGISTERED OFFICE
RAYMOND ARTHUR KING, 72, London Wall, London, EC2M 5NH.

11. The members of Metiva General Company, Limited and Y.C. Resulting in the enlargement of the Company followed the plan made by the Company for the whole of the lesser share capital of Y.C. by means of an Agreement, dated 1948, whereby the Company was authorized to issue new shares of 7 1/2% which would be convertible into 32 Ordinary shares of 10s each to the Company for every 10 Y.C. Convertible Preference shares of 10s each. The Company has since 1948 issued 320 new shares of 7 1/2% which have been accepted by the holders of over 90 per cent. of both classes of Y.C. share capital. It is the intention of the Company to exercise its powers under Section 208 of the Companies Act 1948 to acquire the shares of 1948 and the 32 Ordinary shares of 10s each or Convertible Preference shares of 10s each. The Resolutions necessary for the implementation of the acquisition were passed, in the negotiations between 1948 and 1949, and the Company was advised by Roberts, Fleming & Co. Limited and Y.C. was advised by Metiva Grenfell & Co. Limited.

[illegible]

The value of Y.C.'s investment portfolio, excluding its investment in the Company, shown is the consolidated balance sheet as at December 31, 1970, is made up approximately as follows:

The three companies specified above, including preferred capital	83 per cent.
Other equated securities	23 per cent.
Other unquoted securities	15 per cent.

Y.C. also has a group of United Kingdom subsidiary companies, the principal of which is William Cox & Co., Ltd., a public company listed on the London Stock Exchange. In 1967 and Y.C. now controls 79.4 per cent. of its issued capital. In 1970, William Cox acquired the whole of the issued share capital of P.D.I. Limited ("P.D.I."), another basic business in the same as that of William Cox. The pre-tax profits earned by these two companies since

	William Cox	F.D.I.
	years ended	years ended
	30th June	31st March
1967	55,892	22,512
1968	52,121	27,258
1969	70,000	27,000
1970	83,363	22,507
1971	4,500	4,500

before deducting interest on the overdrafts for F.D.I. amounting to £6,912 * Reported from 17 months

[illegible]

PROFITS AND DIVIDENDS

In his statement circulated on 10th May, 1971, with the last annual report and accounts of the Company, the Chairman of the Board of Directors advised the shareholders that during the current year, together with the ending of an advantageous forward contract for the purchase of the Company's stock, the Company had been able to realize a profit of \$1,200,000. The Directors of the Company forecast that the profits after taxation late after charging the sum of \$27,000, 1971 would amount to not less than \$1,200,000. The Chairman of the Board of Directors stated that the Company had not yet received the results of the 1970-71 tax audit. The profits after taxation of the Y.C. Group for the year ending 31st October 1970, were \$1,200,000. The Chairman of the Board of Directors stated that the Company had not yet received the results of the 1970-71 tax audit. The Chairman of the Board of Directors stated that the Company had not yet received the results of the 1970-71 tax audit. The Chairman of the Board of Directors stated that the Company had not yet received the results of the 1970-71 tax audit.

[illegible]

PROPERTIES		
Details of properties owned by the Company and its subsidiaries are as follows:-		
The Company	Jiramar Bengam, Johore	Timber Held under Government grants
United Mal	Kluang, Johore	Plantations: 0,130.5 acres Held under Government grants
Sedapak	Sedapak, Johore	Plantations: 2,442.8 acres Held under Government grants
C.I.R.D.	Kluang, Johore	Plantations: 7,982.3 acres Held under Government grants
Williamson Co.	The Botry, Tring, Northfolkshire	Plantations and development land: 1,217.9 acres Factory and offices: 463,009 sq. ft.; site area: 2.68 acres
Williamson Co.	Burgess Street, Barnham, Suffolk	Factory: 4,009 sq. ft. 7-year lease from 6th September, 1957 at £1,500 per annum
D.B.	Marlow, Bucks	Freehold Factory: 16,000 sq. ft.
D.B.	68, Haverly Street, Birmingham	Freehold Factory and offices: 15,000 sq. ft.
D.B.	15, Hampton Street, Birmingham	21-year lease from 24th June, 1956 at £2,450 per annum
V.C.	27, London Wall, E.C.2	21-year lease from 24th June, 1956 at £2,450 per annum
Unicomp	Northfleet, Kent	Freehold Ten houses leased to the United States Air Force until 1973

FED FORMA STATEMENT OF CONSOLIDATED NET TANGIBLE ASSETS OF THE COMPANY AND Y.C.

A pro-forma consolidation at book values of the net tangible assets of the Company and Y.C. and their subsidiary companies as shown by their respective balance sheets as of April, 1971 and June, 1971, after eliminating the book value (\$151,852) of Y.C.'s portfolio of 3,293,131 Ordinary shares	<div style="margin-bottom: 10px;">\$</div> <div style="margin-bottom: 10px;">\$</div> <div style="margin-bottom: 10px;">\$</div> <div style="margin-bottom: 10px;">\$</div>
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Plantation, estates	1,301,714	
Prepaid land, buildings and fixtures	296,323	
Store warehouse property	107,117	
Faint, machinery, vehicles, etc.	151,718	1,752,872
Investments		
Unquoted market value 6707,434	708,437	
Unquoted Directors' valuation 5681,049	415,799	1,125,210

		7,913	2,078,058
Current Assets			
Cash for development	102,454		
Stocks and work in progress	82,500		
Patent	110,247		
Bank and cash balances	864,984		
Less: Current Liabilities			
Payables	131,456		
Accounts payable	12,000		
Creditors and bills payable	10,000		
Bank overdraft	45,000		
Financed dividend		814,400	
			40,572
			2,027,566

Less: Deferred Liabilities 138,000
 Taxes 138,000
 The cancellation reserve 247,198
 Loans 2,580,468
 54,262

Less: Minority Interests 52,826,204

Committed Not Transferable Assets attributable to the shareholders of the Company 54,262,204

The above statement should be read in conjunction with the notes appended to the separate statements of the Company and its subsidiaries and the consolidated and combined balance sheet and income statement and cash flow statement.

THE COMPANY PRIOR TO THE ACQUISITION OF Y.C.			
Assets and Liabilities of the Stationing Group and Property in Possession of Each of the Six Companies, 1971, are as follows:-	Ten	The	the
	Investment	Profits before	Profits after
	Payable	Taxation	Taxation
Sales			
535,250	135,584	78,572	14.3
731,281	8,045	105,775	19.7
574,319	13,451	175,522	26.7
701,402	18,887	175,522	26.7
735,188	18,879	110,970	17.5
1,025,257	22,214	144,414	22.5
307,279	11,256	433,593	25.0
7,133,449	23,000	464,252	22.5
1,091,300		197,000	17.5

2. The profits before taxation are—					
on after charging the initial costs of planting oil palms as follows—					
1960					21,886
1969					66,838
1970					53,772
1971 (estimated)					68,900
(b) and after crediting the approximate benefit derived from a remonopatory forward contract for the sale of rubber as follows—					
1970					£ 1,000
1971					35,200
2. The rate of dividend on Greasyshare shares is adjusted for the scrip issue of one for two made in 1965					
Net Tangible Assets					
The last tangible assets of the plantation group at 30th April, 1971, as shown by an audited consolidated statement sheet, were—					
	The Company			The Group	
	£		£	£	£
Net Assets (Note 1)					
Property and developments	297,149			1,301,714	
Buildings, plant, machinery, vehicles and equipment	93,475			125,539	
		300,624			1,428,253
Intangibles (Note 2)					
Goodwill	270,691			270,691	
Patents	321			537	
Subsidiaries	1,119,086			—	271,822
		1,390,098			1,099,787
		1,730,722			
Current Assets					
Advances at the favour of staff and not realisable value	1,222			3,320	
Debtors	85,969			117,833	
Advances with Managing Agents	—			—	
Bank, Securities	115,000			114,000	
Prepaid and cash balances	39,438			191,724	
	246,969			336,977	
Current Liabilities					
Liabilities	73,010			73,579	
Creditors	32,282			73,019	
Dividend payable	—			—	
Payments	920			920	
	106,242			148,318	
		149,727			180,556
		2,891,449			1,998,444
Amounts due to—					
Subsidiary Companies	230,550			—	
Deferred Taxation	18,404			—	
	248,954			—	45,000
Tangible Assets attributable to ordinary shareholders		5,162,485			5,162,485

~~(b)(6)~~

1. Three aspects other than property and development are at, cost less depreciation, off-Gross \$285,520.

Property and development is at Directors' valuation made in 1965, less proceeds of sale paid by the Government to the company as a result of a group purchase offer for claimed rights in open market values for other areas.

The Directors are aware of the fact that the market value of property and development is not constant. This is due to the fluctuating market value of rubber and oil palm plantations. A realization of £2,000,000 could give rise to a liability in taxation.

2. Investment capital

At 30th April, 1971 the Group's quoted investments had a market value of £241,000 and its investments were owned by the Directors at cost of £212,000.

At 30th April, 1971 there were Gross capital commitments amounting to £42,200.

The Directors have no further commitment to invest in the acquisition of shares which is sufficient to cover the period May, 1971 to 1975.

3. Property and Development

The assets relating to property and development which were revealed in the statement, have been covered at the rates ruling at the date of acquisition. Trading transactions and current assets are valued at the latest available figures.

4. The Company has paid a Special Interim dividend of 5% per share in respect of the year ending March 31, 1971, which absorbed a gross sum of £77,000, which is not approved for the foregoing statement.

ACCOUNTANTS' REPORT ON Y.C.
The following is a copy of a Report addressed to the Directors of the Company from the reporting
Accountants and auditors, Messrs. West, Wallis, Price & Co., Chartered Accountants—
8, Groud Street Place,
London, EC2M 7JT.
5th October, 1971.
Directors,

[illegible][illegible]

Period:	The turnover, investment, income, depreciation, profits and taxes before taxation are profits after taxes as follows:-							
	Turnover on the basis explained below and the rates of		Investment Income		Depreciation		Profits after Taxation	
	Turnover 2	General 3	Others 4	Depreciation 5	Profits after Taxation 6	Profits after Taxation 7	Profits after Taxation 8	Rate of Taxation 9
1962	36,741	22,442	89,087	878	108,556	58,102	10	11
1963	37,511	23,438	91,440	808	111,929	60,715	10	12
1964	32,571	22,442	93,340	455	125,208	78,743	10	12
1965	37,511	19,845	93,340	455	133,340	81,568	10	12
1966	54,804	32,370	91,886	1,026	111,068	64,509	10	12
1967	115,701	19,204	72,441	1,840	94,509	81,948	10	12
1968	906,294	17,841	72,137	12,163	93,701	75,000	10	19
1969	133,409	21,129	73,797	19,521	117,743	105,219	10	14
1970	314,116	36,980	80,138	11,360	157,342	112,240	10	14
1971	1,412,758	40,930	82,200	22,158	179,232	128,240	10	14

[illegible]

11. Andrew Yale & Co. Limited to pay a dividend receivable in the latter period.
 12. The following assets of Y.C. and of the Y.C. Group at 30th June, 1971 based on the Audited accounts
 that date were as follows:—

	Y.C.	£	The Y.C. Group	£
Fixed Assets (Note 1)	—	—	235,704	—
Invested land, buildings and houses	—	—	235,704	—
Plant, machinery, equipment, vehicles	—	—	227	—
Investments	—	11,115	86,398	324,819
Current Assets (Note 2)	558,496	—	900,540	—
Debtors	810,681	—	814,052	—
Stocks	278,044	—	—	—
Other Assets	—	1,273,885	—	1,005,540

[illegible][illegible]

WEST, WAKE, PRICE & CO.				Chartered Accountants.
DIRECTORS' AND OTHER INTERESTS				
(a) The interests of the Directors of the Company and their families as defined by the Stock Exchange, and, in the Ordinary shares of the Company and its subsidiaries are as follows:				WILLIAM COX
	THE COMPANY	Revenue	Dividend	
Lord Catto	290,500	1,743,971	2,009	
W. E. Catto	150,500	31,800	2,000	
P. D. Back			1,000	
Sir Henry Birkbeck, Bart.	45,000			
Sir F. M. Hulton				
Sir Denis Lawson, Bart.	1,000			
C. H. F. Porterport	9,010			
S. F. M. Rawlinson	12,540			
Sir E. S. Sarsfield	15,000			
C. J. Tancan				
	928,410	1,778,571	5,600	

[illegible][illegible][illegible][illegible]

(f) The qualification of each Director shall be the holding in his own right alone and not jointly with any other person of a minimum of 100 shares of the common stock of the Corporation. The remuneration of the Directors shall be at the rate of \$1,000 per annum with an additional \$500 for each Director who is also an officer of the Corporation.

(g) The Director shall be elected to a term of three years.

(h) The Director shall be elected to an executive office or who serves on a committee or otherwise performs services for the Corporation shall be paid extra remuneration by way of salary, commission or otherwise. All Directors shall be paid extra remuneration by way of salary, commission or otherwise.

1. The Directors may enter into or be interested in any contract or proposed contract with the Company or with any person or company, whether or not such contract or proposed contract is made with him by him as agent for the Company, provided that the interest of the Director in such contract or proposed contract is disclosed to the Board of Directors in writing and that the contract or proposed contract is approved by the Board of Directors. In such case, the Director shall be interested in the contract or proposed contract as if he were such agent. The Company shall not be bound by any contract or arrangement for the underwriting or subscription by a Director or by any person or company, if the contract or arrangement is not approved by the Board of Directors. The provisions of law which have the effect of rendering any person liable for abatement or forfeiture of shares shall not apply to any Director who has acted in conformity with the provisions of this Article. The Company shall not be bound by any contract or arrangement for the underwriting or subscription by a Director or by any person or company, if the contract or arrangement is not approved by the Board of Directors.

2. The abatement amount for the time being remaining undischarged or all moneys borrowed by the Company and to be repaid by the Company shall not be a debt of the Company until the same is considered as such by the Board of Directors at any time without the previous sanction of an Ordinary Resolution of the Company.

DOCUMENTS FOR INSPECTION

Copies of the following Documents will be available for inspection at the offices of Messrs. Luskaters & Gosses, 15 Abchurch Lane, London, E.C. 4A, on usual business hours on any weekday (Sundays excluded) on or to 1st November, 1971:-

(i) The Accounts of the Company for the year ended 31st October, 1970, and the accounts of the Company for the two years ended 31st October, 1970, and the accounts ended 31st October, 1971, and of the Company for the two years ended 31st October, 1971.

(ii) The contracts referred to above, including the Agreement between, inter alia, certain shareholders of Y.C. and the Company.

(iii) A summary of the Commission arrangements between Mr. P. J. Q. Buck and William Cook & The Accountants' Report and Statement of Profits Admitted by Messrs. West, Walker, Price & Co on Y.C. together with their written consent which they have given to the issue of this Advertisement containing the Report and reference thereto in the form and context.

(iv) The valuation of certain properties owned by Messrs. G. J. Harvey & Partners, together with their written consent which they have given and have not withdrawn to the issue of this Advertisement containing the references to the valuation in the form and context in which they appear in this Advertisement.

(11th October, 1971)

FURTHER COPIES

Other copies of this Advertisement are available in the electrical services of the Exchange Telegraph Company, 15 Abchurch Lane, London, E.C. 4A, during core business hours on any weekday (Sundays excluded) on or to and including 1st November, 1971 from:-

ROBERT FLEMING & CO. LIMITED,
9 Crosby Square,
Leeds, LS2 7PL.

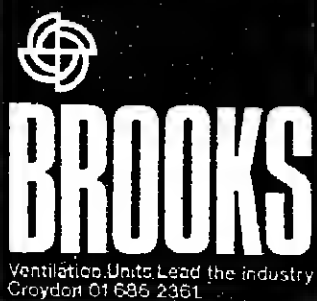
JOHN GOSWAM & FITZMAURICE,
Woolston House,
Cottonian Street,
London, EC2R 5EL.

MORGAN GRENFIELD & CO. LIMITED,
23 Great Winchester Street,
London, EC2A 3AA.
WILLIAM HENDERSON & CO.,
11 Old Jewry,
London, EC2R 6OR.

INSURANCE . . .

For Notes, see Page 29

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Lombard

A bigger say for "ordinary people"

BY C. GORDON TETHER

OF ALL the protest movements that have come into being since the world began to think more fundamentally about the direction in which it is moving, none is surely more worthy than that which insists that greater regard must be paid in future to the feelings of the mass of the people—and correspondingly less to experts whose ideas are all too often apt to take us in the wrong direction. What a great pity it is that so many of the hot gospellers of the new religion are displaying such a marked disinclination to practise what they preach.

"In future we should be wary of the vanity of experts and not be afraid to protest," so wrote recently a national newspaper which has always insisted that Mr. Heath was right not to be deterred by public hostility from taking Britain into the Common Market. "We should always," it went on, "demand to see the figures and examine them very carefully since they are very often on the side of modesty, conservatism and the rehabilitation of what exists and what is loved."

Thrilled

This was the moral it had drawn from a Government-sponsored survey which suggested that children in the costly high-rise flats are more prone to crime and less keen on schooling than others. And it was so thrilled with its discovery that ordinary folk should count that soon afterwards it brought the matter up again in connection with our decentralisation difficulties.

What had happened, it maintained, was the outcome of Whitehall's decision to accept expert advice to base the new set-up on the old E. And the warning in this connection for all Governments was "to pay more attention to what ordinary people think and less attention to experts."

Split minds

After all, in this case, too, important figures are being withheld, so that there is no opportunity "to examine them carefully." And great reliance is being placed on expert views—for example in the CBI's assessment of the likely consequences of entry for Britain's economic life—in justifying flying in the face of public opinion.

Yet there are no signs that this convert to the theme that "ordinary people may know best" is re-examining its attitude to the question of the part that the public's wishes should play in the EEC debate. And a similar split-mindedness can be detected among those pro-Marketisers who have recently been attacking—and certainly not without cause—the economists on the grounds that their current obsession with market-led growth is inimical to the true interests of the peoples they are supposed to be helping.

How, one might well ask, can they be sure that their own expertise on the EEC issue is so superior to that of the economists in relation to growth that it is all right for them to want to impose their will on an unwilling public?

Supreme folly

In short, it is simply not good enough to insist that expert opinions must be treated with the greatest suspicion when they are not to your taste and accepted more or less unreservedly when they happen to run parallel to your own ideas. And, surely, if there was ever a matter wherein it was particularly important to pay more attention to what ordinary people think and less attention to the experts, it is that involving British entry into the EEC.

As the Investors Chronicle observed after examining an authoritative investigation of the prospects for British industry within an enlarged EEC, if entry is a success, it will be a triumph of hope over experience. Needs less to say, hope is going to start under a considerable handicap if the adventure cannot count on the willing co-operation of all sections of the people.

Again, if there is one thing the Ulster holocaust teaches us, it is the supreme folly of trying to integrate peoples who have different ideas.

THE LEX COLUMN

Confectionery in the Common Market

One of the few major groups represented at a symposium on the U.K. food industry in the Common Market, organised by brokers James Capel last week, which was able to point to actual achievement rather than vague hopes was Rowntree Macintosh. The EEC accounted for a third of group sales growth between 1968 and 1970: this year, it will contribute something approaching one-sixth of total sales, or very roughly £20m. against under £12m. in 1970.

Promotion costs

The European entry fee was substantial, given the cost of setting up manufacturing and distribution systems and the fact that promotion for a brand in the early stages of its launch may cost two or three times the eventual budget per ton of sales: product development and test marketing come on top of that. Rowntree's EEC operation moved into the black in 1968, but pre-tax margins are still significantly below the group average of 5½ per cent. over the past three years at, say, 3 per cent.

At the end of 1970, perhaps one-fifth of group plant and machinery was situated in Europe, and that proportion may have been increased by the formation of a joint company for the operation of the Menier chocolate business in Paris. At the moment, the EEC sales forecast totals about 130, approaching half the U.K. force in 1970.

number and rather more than that in potential, since whole-sale—rather than direct deliveries—is much more important in Europe than the U.K. (although that also means more effort in terms of point of sale material and so on).

Plainly this operation can support a usefully greater volume of sales than it is currently getting: only four of the group's main "count" lines are produced in Europe, and that 1975 excludes major brands like Aero, Rolo, plus the fruit gums and pastilles. Moreover EEC confectionery consumption is expanding fast, with the total volume of sales up by over half during the 'sixties when U.K. consumption was static at best.

After taking in other overseas markets, Derek Crouch

interests, the dull U.K. market now accounts for under two-thirds of Rowntree's sales: confectionery in Europe and we get one reason why the shares have more than held their big jump at following the revised profits forecast last month, with a prospective p/e of perhaps 14½ (historical and 9.3 (prospective)).

Europe has much less to offer the Cadbury Schweppes confectionery side: now that it has been squeezed out of its German manufacturing operation, largely by a price war, sales are now confined to franchise operations and direct exports, which are insignificant in group terms.

Of more direct relevance is the European soft drink market, which CS expects to grow by 70 per cent. between 1970 and 1975 at current prices; it reckons its own sales there will multiply 2½ times over in the same period, the major part from deep mining, operating profits were £16.4m. out of an NCB total of £24.6m. What is more, the NCB has stressed the need of expand output and at least 10m. tons per annum

in order to replenish its stocks, down 57 per cent. in 1970-71. As for Crouch himself, the group has the virtue of consistency with profits of £808,000 before tax, against £452,000 last year and the forecast of £1.1m. for the current year. It is an acknowledged leader in opencast mining contracting, and must be planning to capture a large slice of the planned NCB expansion; it is noticeable that the company has recently secured three contracts lasting between two and 14 years, the total value being £28.7m. against opencast mining turnover of £8.8m. last year.

Against this background Hill Samuel's offer for sale of 1.85m. shares in Derek Crouch (Confectionery) is an opencast mining specialist, needs to show that both the company and its area of operations are less vulnerable than the average NCB-orientated business; by and large, it does so successfully. The last NCB accounts show that while only 8.5m. tons of coal were mined opencast, against 133.3m. tons from deep mining, operating profits were £16.4m. out of an NCB total of £24.6m. What is more, the NCB has stressed the need of expand output and at least 10m. tons per annum

However, the word is that there is little need for any further major capital expenditure in the short term, the overdraft had come back to £1.4m. at the beginning of this month and with a firm cash flow it is expected to be substantially reduced "from that level in the next fifteen months."

The case, then, is made for a premium over other NCB suppliers, and Hill Samuel is relying on it with Crouch coming out on a prospective p/e of 11.3. However, the potential premium over that may be limited in the short term. Crouch's ambition is to expand from its specialist base into related fields; there is a blueprint for that in the recent performance of Leonard Fairclough: but considering that Fairclough is up from a "low" of 115p this year to its current 272p, has overcome market worries about its durability and still stands on a prospective p/e of only 14, Crouch seems bound to go through a period of proving its point.

Clearing-up

So the growth is there, both past and prospective. The next question is whether Crouch can cope with it. It has had to gear itself up by investing £7.4m. on new plant—including £2.3m. on "Big Gordie," a giant drag-line excavator—over the past three years or so; by end-June last this had left it with a net working capital deficit of £1m. and an overdraft of £1.7m.

See also Page 26

Faulkner warns of 'war weariness' in U.K.

BY JOHN GRAHAM

MR. BRIAN FAULKNER, Prime Minister of Northern Ireland, this week-end appealed yet again for unity in his party and warned of the increasing danger of "war weariness" among the British people.

He said that one of the main objectives of the terrorists' campaign was to produce a feeling of disgust and impatience in England. This could lead to political pressure "to abandon Ulster to a chaotic fate and seek disengagement at any price."

"Tribal war"

Such appeals and such warnings are becoming a more frequent theme with Mr. Faulkner, and show how anxious he and other members of his Government are that Britain should continue to give him full support.

A British citizen, he explained, might have the horror of the whole thing brought home to him by the murder of a soldier from his own home town. He would ask himself, "Why should our boys risk their lives over there? Why should we be involved in a sordid Irish tribal war?"

The answer, said Mr. Faulkner, was to convince the citizens of Britain that the British public must continue to help Northern Ireland and that Northern Ireland deserved such help.

"Anyone who reads the editorial comments of the influential British Press will see that the Unionist position and the difficulties to be faced in Northern Ireland are now much better understood," said the Prime Minister. "I am con-

vinced that this trend of enlightenment can be continued, so that the average citizen in Britain can be identified with us. Unionists must be the backbone of that community with whom our cross-Channel friends can identify, and we must present a united front of people who are not only determined and resolute but reasonable and conciliatory."

Even Mr. Faulkner was making his appeal, one of his most powerful opponents, Mr. William Craig, a former Unionist Minister, was striking a different note. He told a Unionist meeting that the province had almost reached the turning point and that he could see an awakening of the real stuff of which Ulster people are made.

"It will only be a matter of months," he said, "before you will have to face the crunch and you must not surrender to accept an Irish Republic as inevitable. You will have to find out how to mobilise the strength of the loyalists and find positive proposals to recover those things which have been lost, including control of internal security, from Stormont."

"It will be necessary to restore the Unionist Party to what it was under Carson and Craig."

While this political battle continues within the Unionist Party, the British Army today claimed several successes. They said they had found a large quantity of bomb-making equipment, including more than 200 detonators, more than 300 feet of fuses and quantities of explosives, incendiary devices, and relay switches.

BELFAST, Oct. 10.

They also said they have made some important arrests of wanted men in the last few weeks. Three more were detained on the last seven days of the Army and police between them have detained about 30 IRA suspects.

The IRA, meanwhile, claims that its top leaders are still free and biding in various parts of the province.

This week-end one woman died when a Belfast pub was destroyed by a bomb. The police reported about half a dozen other explosions most of them small, and Army patrols were fired on about three times, without any casualties.

The wrecked pub was owned by a Catholic, and most of its clientele was Catholic. The police so far have no theory about who placed the bomb, but they do admit the possibility that it was in retaliation for the Protestant pub that was blown up in the Shankill Road nearly two weeks ago.

New stage

If this is the case, then the working-class Protestants, possibly through the mysterious organisation known as the Ulster Volunteer Force, may have begun to fight the war openly themselves.

If it was in any way responsible for the explosion on Saturday night, it also the blowing up of a water pump house last week serving Catholic housing estates was also the work of Protestants, then the struggle for this province has entered a new stage.

Ulster Republicans study plans for Stormont's revival, Page 8

MAM and Wyndham form joint company

By Arthur Sandles

HOWARD and Wyndham is forming a joint company with Management Agency and Music to consolidate and expand the joint theatrical production activities of the companies. The new venture is to be called Wham Enterprises.

Announcing the new company, Mr. Gordon Mills of MAM and Mr. Ralph Fields of Howard and Wyndham, said Wham would "continue and extend the joint theatrical productions already promoted by the two companies both in the West End of London and in the provinces."

The companies are currently involved in the joint presentation of productions in Glasgow, Manchester, Norwich and Oxford.

Further co-operation could well follow. "Joint ventures in other fields of the leisure industry may also be pursued jointly through Wham Enterprises," said Howard and Wyndham.

When pressed to define "leisure" only a few days ago, Mr. Gordon Mills had some difficulty in setting limits. In the end, he said: "We are interested in anything that will make money."

New P & O passenger division

By James McDonald

THE P & O GROUP'S new passenger shipping division—one of five operating divisions formed this year under a major reorganisation which will lead to the abolition of many traditional company names within the group—has become operational.

The division controls 13 large passenger ships ranging in size from 43,000 gross tons to 14,000 tons and with a total passenger capacity of nearly 17,000. The fleet, claimed to be the largest in the world, includes nine existing P & O liners; two ships under the British India flag—Nevada and Vanguard; and the Cathay and China Mail of the Eastern and Australian line.

Chief executive of the passenger division will be Mr. Peter E. Parry. Under him will be five executives: Mr. J. G. Davis, general marketing manager; Mr. H. F. Spanton, fleet manager; Mr. A. M. Stirling, development manager; Mr. M. T. Polney, financial controller; and Mr. W. A. Mackenzie, scheduling manager.

The National Highway Traffic Safety Administration has apparently already decided to issue shortly a consumer bulletin warning owners of the affected cars of the dangers they may be running. The agency does not have the power to order General Motors to recall the cars, but, according to reports, GM is already paying for repairs necessary because of the defect and may therefore be already committed to a de facto, if not de jure, recall.

GM has so far made no formal comment on the situation, other than to say that it already has come up with a device to check for deterioration of the engine oil, along with another fault, rusting frames on large fall there is nothing connecting Chevrolet's made in 1965, has the engine to the body of the car reached dangerous proportions, and, although the engine may come up with device to check power or, on occasions, as a result of deterioration of the engine oil, along with another fault, rusting frames on large fall there is nothing connecting Chevrolet's made in 1965, has the engine to the body of the car reached dangerous proportions, and, although the engine may come up with device to check power or, on occasions, as a result of deterioration of the engine oil, along with another fault, rusting frames on large fall there is nothing connecting Chevrolet's made in 1965, has the engine to the body of the car reached dangerous proportions, and, although the engine may come up with 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